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OCTOBER 22, 1951

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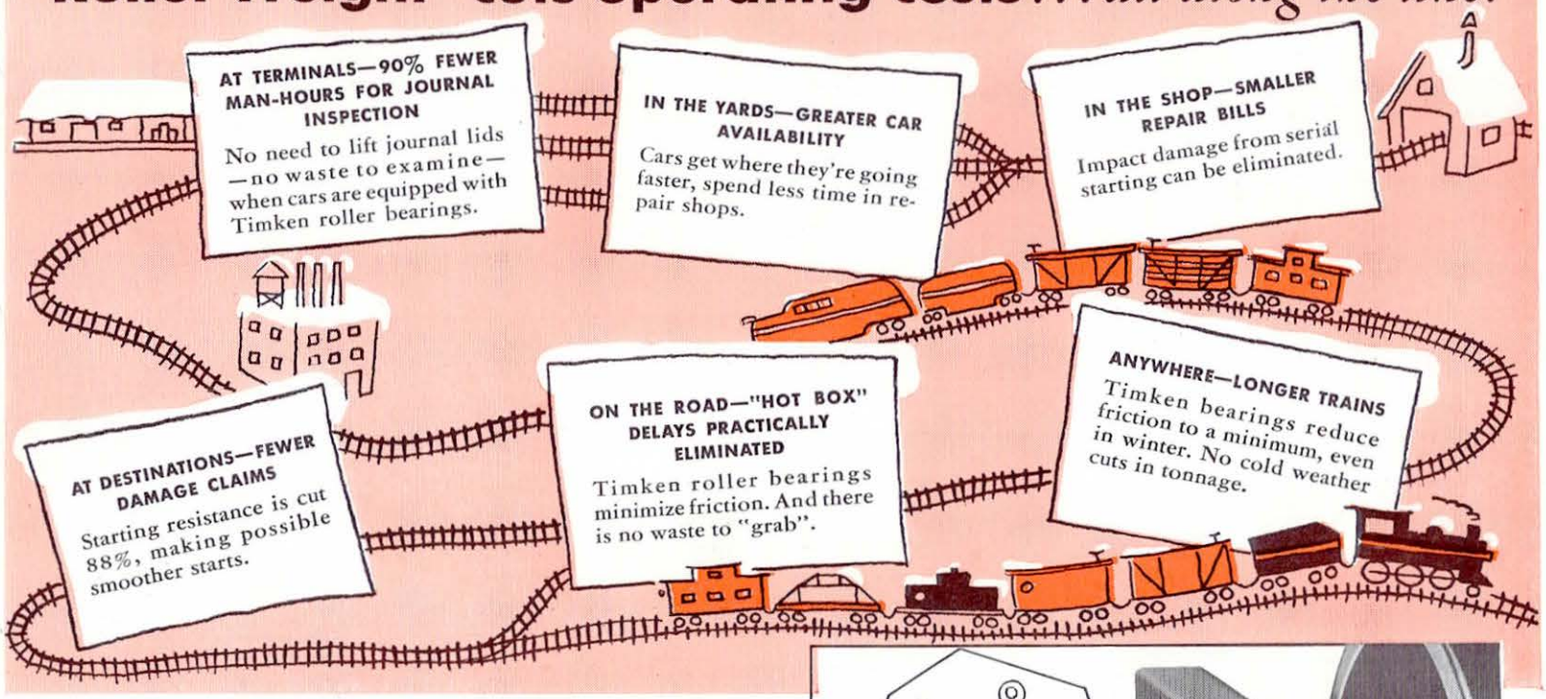
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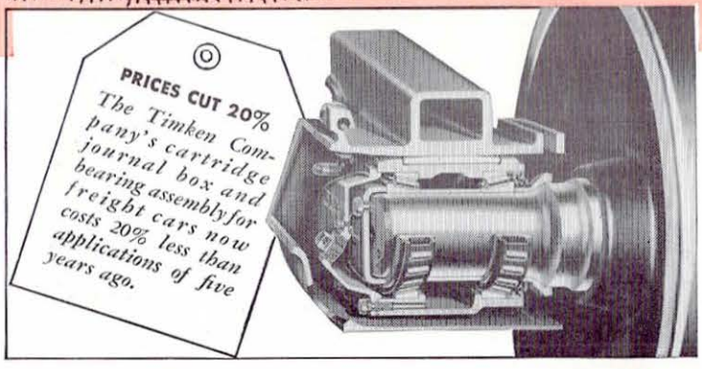
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The Timken Company's cartridge journal box and bearing assembly for freight cars now costs 20% less than applications of five years ago.

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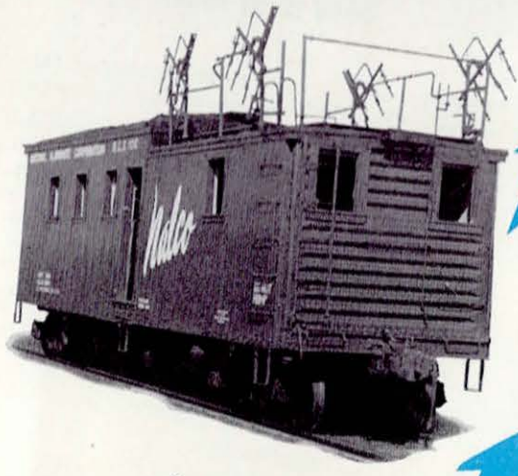

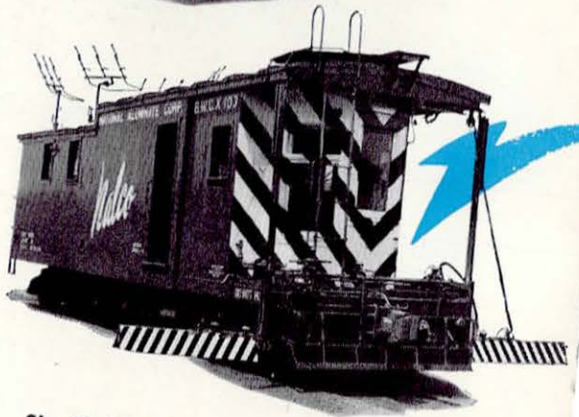

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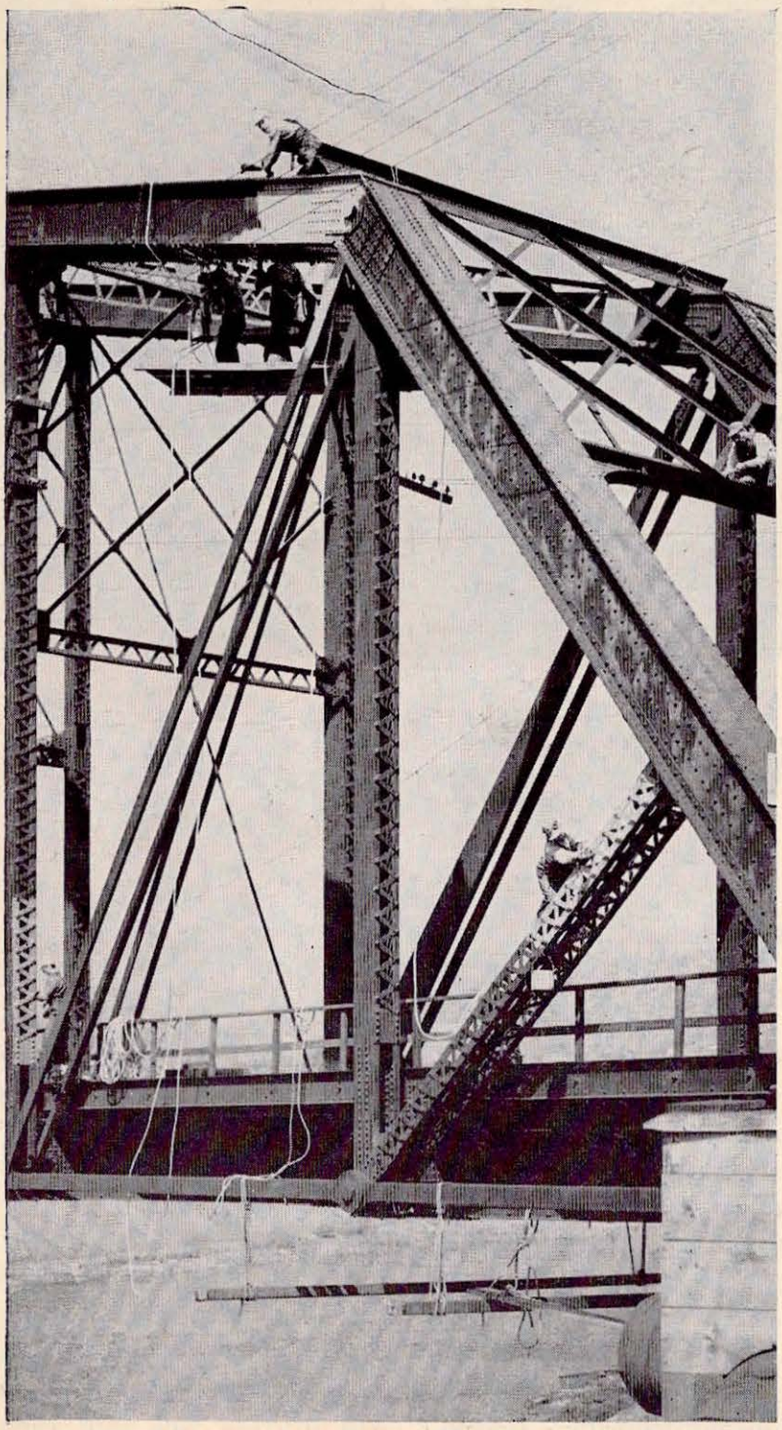

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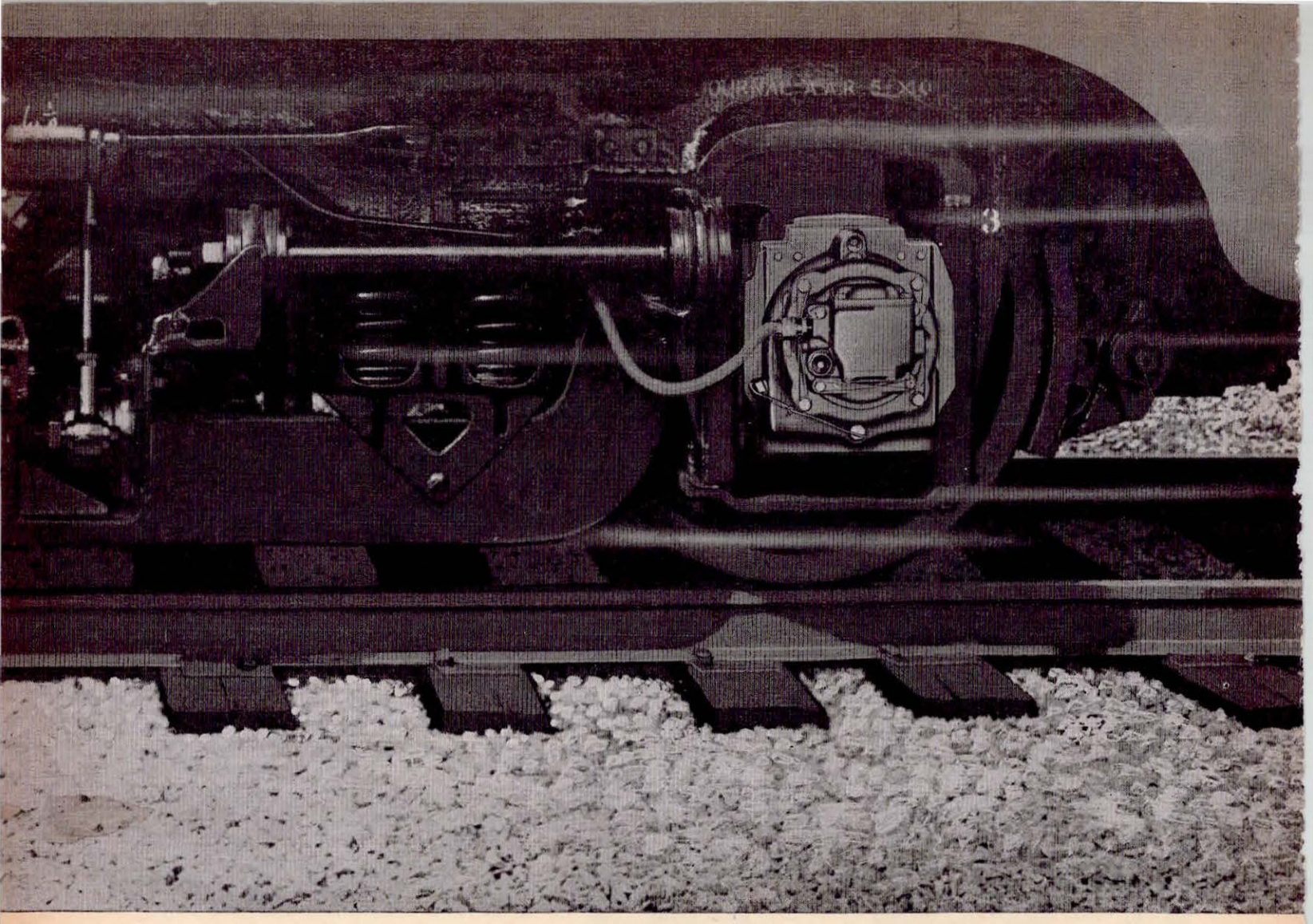

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Vol. 131, No. 17 October 22, 1951

RAILWAY AGE

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Published weekly by the Simmons-Boardman Publishing Corporation at Orange, Conn., and entered as second class matter at Orange, Conn., price, $3.00 a year to railroad employees only in U. S., U. S. possessions and Canada, payable in advance and postage free. Subscription price to railroad employees elsewhere in the Western Hemisphere, $10.00 a year; in other countries, $15.00 a year. Two-year subscriptions double the one-year rate. Single copies 50¢, except special issues $1. Address Robert G. Lewis, Assistant to President, 30 Church Street, New York 7.

IN THIS ISSUE

EDITORIAL COMMENT:

State Regulation Works Much Better 37
Better Not Done at All Than Half Done 38

GENERAL ARTICLES:

Surprising Facts Disclosed by Diesel Wheel-Slippage Investigation, by F. Thomas 39
How Flood-Damaged Equipment Was Returned to Service Quickly 44
Economical Buildings to Shelter Diesels 50

CONVENTION REPORTS:

"Safety Must Be Personalized" 53
Railroads Get Praise and Prodding at National Shippers Board Meeting 55

NEWS FEATURES:

Railroads' Share of Intercity Ton-Miles Falls Below 60 Per Cent for First Time 11
Railroading Plays Great Tactical Role in Korea 12
"Rails Face Greater Task Than in World War II" 13
Railroads Seek More Time on Uniform Classification 13
Elmer J. Stubbs Heads D.T.A. Rail Division 18
D.P.A. Announces C.M.P. Allotments for 1st Quarter 18

DEPARTMENTS:

General News 11
Letter from a Reader 52
Operating Revenues and Expenses 68
Freight Operating Statistics 78

Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 79 West Monroe Street, Chicago 3, Ill. Washington 4, D. C.: 1081 National Press Building—Cleveland 13: Terminal Tower—Portland 5, Ore.: Terminal Sales Building—Los Angeles 17: 1127 Wilshire Boulevard—San Francisco 4: 1204 Russ Building—Dallas 4: 2909 Maple Avenue.

Published by SIMMONS-BOARDMAN PUBLISHING CORPORATION, New York 7

Railway Age Railway Mechanical & Electrical Engineer Railway Engineering & Maintenance
Railway Signaling & Communications Car Builders' Cyclopedia Locomotive Cyclopedia
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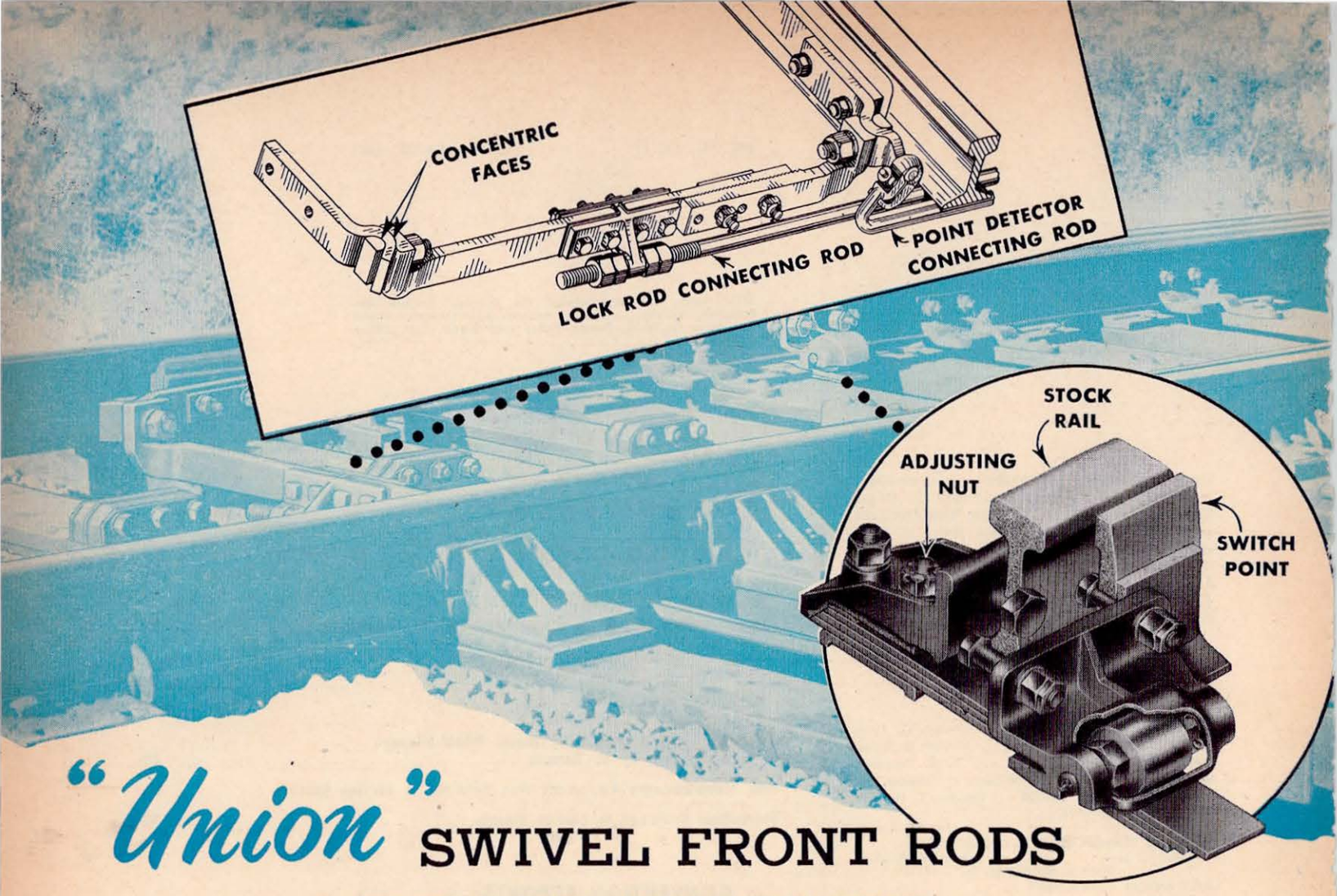
Books covering transportation and building

Railway Age is a member of Associated Business Publications (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service. Printed in U. S. A.



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WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, eight months
1951 ..... $ 6,762,632,765
1950 5,885,664,117

Operating expenses, eight months
1951 ..... $ 5,359,781,366
1950 4,559,522,971

Taxes, eight months
1951 ..... $ 752,009,833
1950 651,181,004

Net railway operating income, eight months
1951 ..... $ 513,636,133
1950 556,537,130

Net income, estimated, eight months
1951 ..... $ 326,000,000
1950 372,000,000

Average price railroad stocks
October 16, 1951 ..... 57.00
October 17, 1950 ..... 49.17

Car loadings, revenue freight
40 weeks, 1951 31,200,998
40 weeks, 1950 29,362,762

Average daily freight car surplus
Week ended October 13, 1951 .. 2,872
Week ended October 14, 1950 .. 2,186

Average daily freight car shortage
Week ended October 13, 1951 .. 20,362
Week ended October 14, 1950 .. 35,769

Freight cars delivered
September 1951 8,533
September 1950 5,131

Freight cars on order
October 1, 1951 140,135
October 1, 1950 106,611

Freight cars held for repairs
September 1, 1951 96,020
September 1, 1950 113,654

Net ton-miles per serviceable car per day
July 1951 (preliminary) 955
July 1950 969

Average number railroad employees
Mid-August 1951 1,295,941
Mid-August 1950 1,270,215

In This Issue . . .

CLEAN-UP JOB: Those mid-western floods of last July won't, we trust, be repeated—anywhere, ever. But if they should be, any affected railroad might do a lot worse than follow the methods used by the Santa Fe to recondition 51 mud-and-water-impregnated diesel units in just 17 working days. How the job was done is told on page 44. Other articles dealing with various phases of diesel operation are F. Thomas' report on the New York Central's investigation of wheel slippage (page 39), and a description of the economical diesel shelters in use on the C. & O.'s Pere Marquette district (page 50).

NEWS OF THE INDUSTRY: U.P. plans $5.6 million diesel shop at Salt Lake City.—Col. Lasher outlines tactical importance of rail transportation in Korean fighting.—Stubbs and Forgash join D.T.A. staff.—Canadian Parliament seen sure to consider important transport legislation.—Supreme Court rules on cases affecting railroads.—A.A.R. reactivates Motor Transport Division.—National Defense Transportation Association meets at San Antonio; National Association of Shippers Advisory Boards at Cleveland (page 55), and Railroad Section of National Safety Council at Chicago (page 53).—Second quarter truck traffic up 10.2 per cent.—D.P.A. announces C.M.P. allotments for 1952's first quarter—and they're a lot below current quarter allotments—only enough, in fact, for 18,000 domestic railroad freight cars and 636 domestic railroad locomotives.—U.S.C. of C. to hold third regional transport meeting at Cleveland in December.—Conductors "don't like" Pullman report.—Dorr becomes assistant secretary of N.I.T. League.—Railroads ask more time on uniform classification.—American Seating Company takes over Karpen line.

In Washington . . .

THE GOOSE AND THE EGG: How much longer do railroad employees, or Congress, think the railroads can continue to carry larger and ever larger pension costs? The question is prompted, of course, by Congressional passage last week of amendments to the Railroad Retirement Act, the Senate version of which is estimated to cost the roads an additional $25 million a year, and would further widen the already yawning gap between "social security" costs borne by the railroads and those paid by their competitors. Isn't it about time to remember the old fable of the goose and the golden eggs?

JUST SUPPOSE! In 1950, for the first time, the railroads' share of total inter-city freight traffic, measured in ton-miles, fell below 60 per

WEEK AT A GLANCE

cent, according to the latest "Monthly Comment" of the I.C.C.'s Bureau of Transport Economics and Statistics (page 11). Ton-mileage by truck—common, contract and private—was just a little over *one-fifth* the railroad total. But *revenues* of all for-hire motor carriers were *nearly one-half* the total revenue of all Class I railroads. Granting that the figures are not absolutely comparable (ton-mile data covers freight trucking only; revenue data includes buses as well), the general comparison still stands—by highway, *one-fifth* the transportation for almost *one-half* the cost. What does that indicate about relative overall economy of the two modes of transport—or the size of the nation's total freight bill if everything moved by highway? It's superfluous, of course, to add that rail revenues cover *all* costs of rail transport and heavy tax payments beside; truck rates cover only part of the cost of motor transport, with the poor old taxpayer making up the difference.

UNION-SHOP ADVICE: Some railroad attorneys are advising that union-shop and check-off agreements should have provisions under which union parties agree to "indemnify, defend, and save harmless the company from any and all liability arising from the entering into or complying with the within agreement."

. . . And Elsewhere

"WHATSOEVER A MAN SOWETH . . .": Officials of New York's Nassau county recently said they "regrettably believe" eventual government control of the bankrupt Long Island is "inevitable." The Long Island Transit Authority, created to reorganize the road, disagrees with that conclusion. We trust the authority is right. But if not, then we hope the county officials will realize—though it's too much to expect them, as politicians, to admit—that government control has been made "inevitable" primarily by their own policies toward the railroad—policies of excessive taxation, opposition to its requests for legitimate fare increases, promotion of subsidized competition, and insistence upon its paying a disproportionate share of the cost of *public* improvements.

SEEDS OF MORE LUMBER TRAFFIC: So that the South will continue to be one of the country's prime warehouses for wood, reforestation in 13 southern states is being pushed toward what may be an all-time record. According to a report of the Southern Pine Association, the current tree planting goal has been set at more than a quarter-billion seedlings. Private industry sparked the reforestation boom during the past season, the survey reveals. Of 187,600,000 seedlings distributed from state nurseries last winter and spring, nearly 58 per cent were purchased by private companies—principally in the lumber and pulp and paper industries. In addition, lumber manufacturers planted over six million seedlings grown in company nurseries or secured from other sources. More than 44,300,000 seedlings were planted on 52,000 acres of company owned lands, while another million-plus were planted by farmers.

HENRY T. STETSON (above), has just been elected president of the Safety Car Heating & Lighting Co. Mr. Stetson, formerly a vice-president of the firm, succeeds the late Charles W. T. Stuart.

MORE TRANSCONTINENTAL COMPETITION? By 1953, if current reports are correct, commercial air lines will be able to obtain a new type of cargo plane, capable of carrying pay loads in excess of 20 tons on transcontinental schedules of eight to nine hours, at a direct cost of less than 5 cents per ton-mile. The new plane, being developed by Lockheed from its Super Constellation passenger transport, is said to have a bigger load capacity—and lower ton-mile cost—than any commercial cargo transport now operating or being planned.

LITTLE THINGS HAVE A WAY OF ADDING UP!

With traffic increasing sharply, there's extra work ahead for your Diesel locomotives—extra need to guard them against breakdowns. Sometimes these breakdowns are caused by little things—rings sticking, valves hanging up, perhaps a scored bearing—but these *little* things can add up to costly downtime!

Socony-Vacuum *Correct Lubrication* helps prevent such troubles. For years we have worked closely with operators and builders, conducting extensive laboratory tests and *field* evaluations in cooperation with them.

As a result, our Diesel lubricating oils are continually being improved—are increasing Diesel availability, extending periods between overhauls and cutting maintenance costs on many leading roads right now! Equally important, they are designed to be compatible with other oils.

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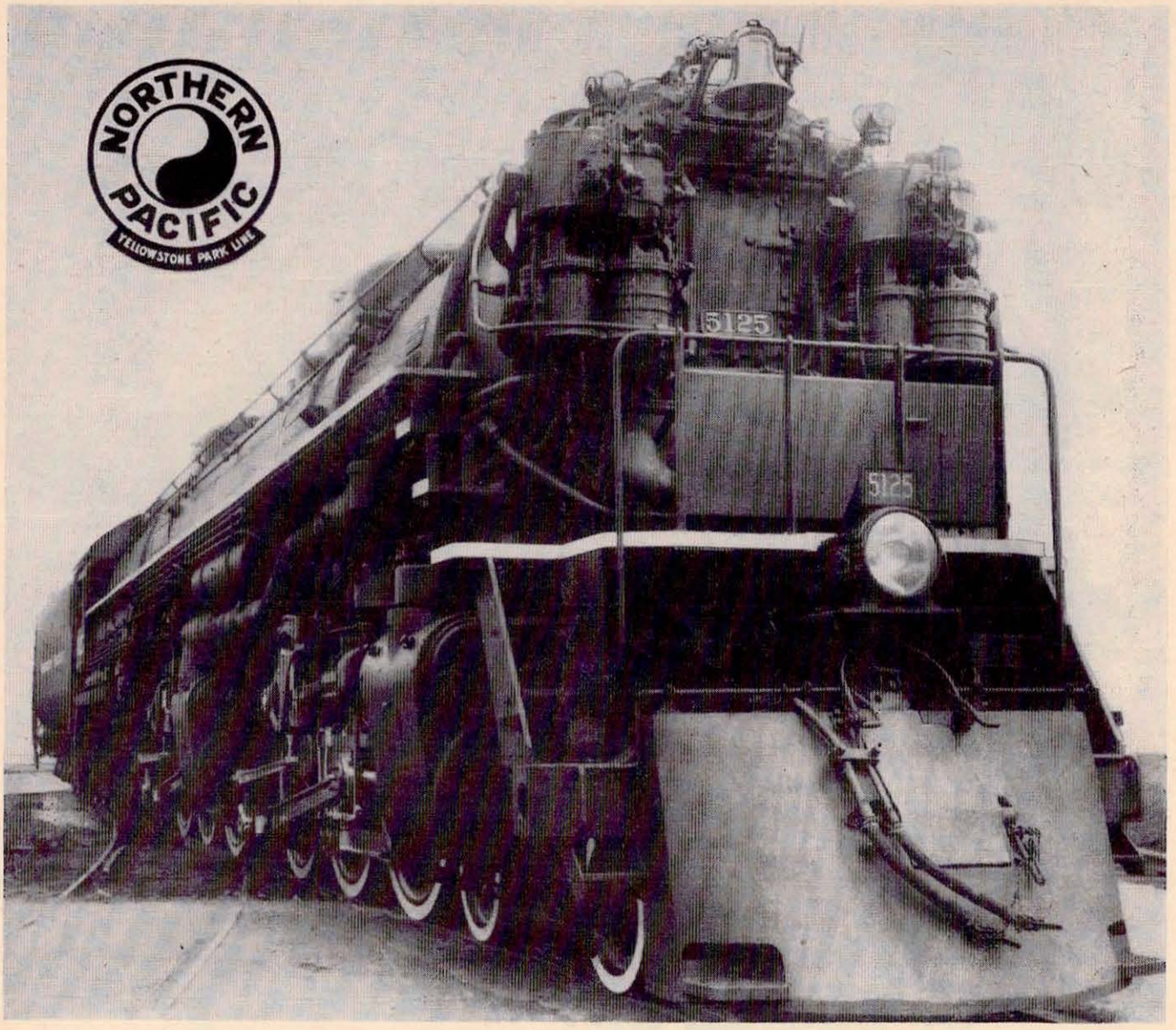

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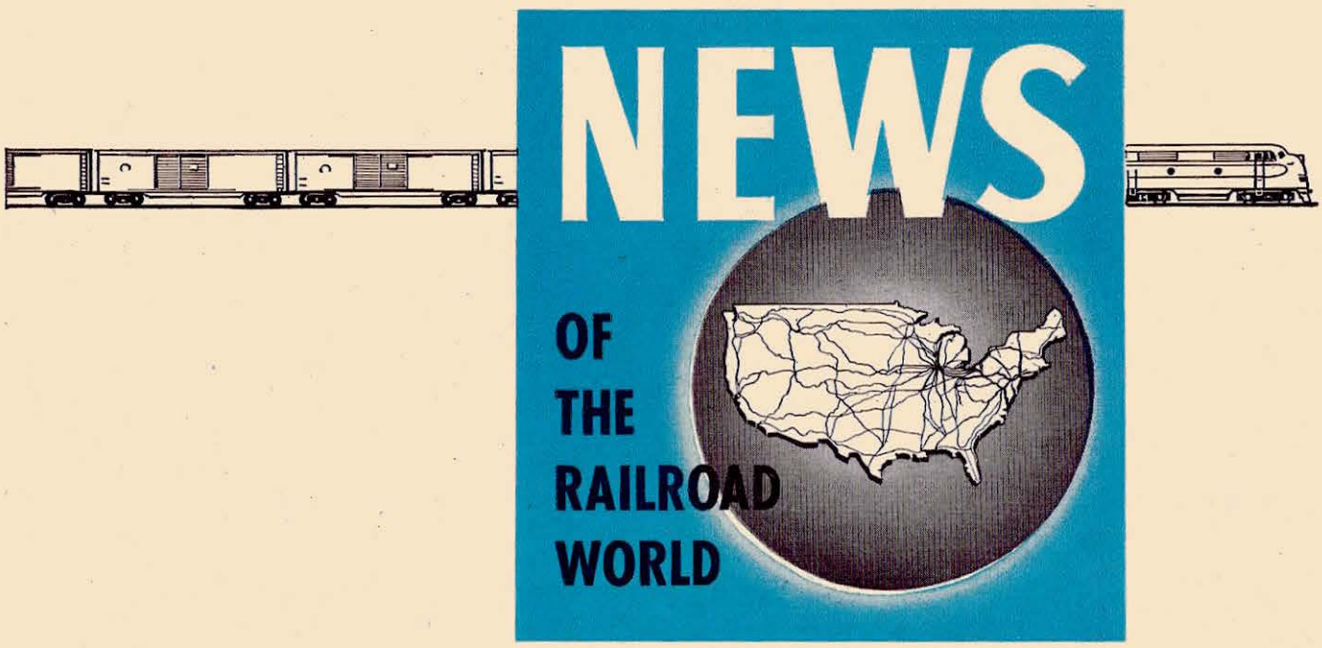


Railroads' Share of Intercity Ton-Miles Falls Below 60 Per Cent for First Time

I.C.C. bureau's "Monthly Comment" puts 1950 proportion at 58.7 per cent; also has figures showing that operating revenues of motor carriers increased relatively more than national income between 1939 and 1950, while the relative growth of railroad revenues was slower than the national-income pace

The railroads' share of total intercity freight traffic, as measured by ton-miles, fell below 60 per cent for the first time in 1950. It was 58.7 per cent, compared with 60.6 per cent in 1949 and 72.8 per cent in 1943, the peak of the 1939-1950 period.

This was shown by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission in the latest issue of its "Monthly Comment." The issue also had figures showing that operating revenues of motor carriers increased relatively much more than national income between 1939 and 1950, while the relative growth of railroad revenues was substantially slower than the national-income pace. Other articles included a tabulation setting out the distribution by important commodity classes of the general increases in freight rates, and analyses of the costs of cross ties and rails laid in replacement.

Trucks Show Big Gain

An accompanying table, reproduced from the "Comment," sets out the bureau's figures showing the volume of 1950 and 1949 intercity ton-miles of freight by kinds of transportation. Commenting on the truckers' 1950 share, 12.4 per cent, the bureau said that this was a peak which compared with a 1944 figure of 4.5 per cent. Total 1950 ton-miles performed by the truckers reflected an increase of 34.5 per cent above 1949, which compared with a rise of only 11.6 per cent in railroad ton-miles.

The data on motor carrier revenues of the 1939-1950 period were bureau estimates covering all Class I, II, and III common-carrier and contract truckers and bus lines. On the basis of 1939 as 100, the figures showed a 1950 index number of 444.8 for total operating revenues of these motor carriers. On the same basis, the 1950 index of national income was 325, while that for total operating revenues of Class I railroads was 237.1.

The absolute figures showed that intercity revenues of common-carrier truckers rose from $579.1 million in 1939 to $3,063.3 million in 1950. Intercity revenues of contract truckers were up from $112 million, to $199.3 million. Total operating revenues, both inter-city and local, of both types of truckers were $792.2 million in 1939 and $3,737.1 million in 1950.

Motor Revenue 45% of Rail

The gross realized by motor carriers of passengers was put at $169.1 million for 1939 and $538.7 million for 1950. The latter figures included $399.4 million from intercity, regular-route bus operations.

Volume of intercity freight traffic in ton-miles by kinds of transportation, years 1949-1950

Transport agency	Ton-miles (billions) 1949	Ton-miles (billions) 1950[1]	Percent of increase 1950 over 1949	Percent of annual total 1949	Percent of annual total 1950
Railways, steam and electric, incl. mail and express	534.7	596.9	11.6	60.6	58.7
Highways, for hire and private trucks	93.7	126.0	34.5	10.6	12.4
Inland waterways, incl. Great Lakes	139.4	164.6	18.1	15.8	16.2
Pipe lines (oil)	114.9	129.2	12.4	13.0	12.7
Airways (domestic revenue service, incl. express and mail)	.2	.3	[2]31.3	[3]	[3]
Grand total	882.9	1,017.0	15.2	100.0	100.0

[1] Preliminary estimates
[2] Airway ton-miles used in computing percentage totaled 306 million in 1950, and 235 million in 1949.
[3] Represents about .03 of one per cent in 1949, and .03 of one per cent in 1950.

The bureau also calculated that total revenues of motor carriers in 1950 amounted to about 45 per cent of the 1950 gross reported by Class I line-haul railroads. This compared with 40 per cent in 1949, 34 per cent in 1948, and only 20 per cent in 1944. The 1939 proportion was 24 per cent.

The "Comment" tabulation showing distribution of general rate increases by important commodity classes is reproduced here. The bureau noted that "the selected commodity classes, plus less-carload traffic, accounted for about 65 per cent of the gross freight revenue in 1950." It also pointed out that the table's figures were based on an assumption that increases in intrastate rates have been in line with the interstate adjustment.

Tie and Rail Costs

The analysis of the cost of cross ties laid in replacement showed that the average cost per treated tie rose from $1.312 in 1941 to $2.791 in 1950, an increase of 112.7 per cent. Meanwhile, the average cost per untreated tie rose from 81.8 cents to $1.335, an increase of 63.2 per cent.

During the 1941-1950 period, the number of treated ties laid in replacement each year rose from 1941's 41,461 thousand to a 1944 peak of 44,897 thousand, then declined to a low of 28,875 thousand in 1949. The 1950 total was 29,340 thousand, and that program cost the railroads a total of $81,881,000.

Untreated ties laid in replacement in 1950 totaled 1.2 million, as compared with 5.8 million in 1941. The bureau said that, at the close of 1950, treated ties accounted for 92.8 per cent of the total ties (992.2 million) in maintained tracks of Class I railroads. The corresponding percentage as of December 31, 1941, was 83.7.

The like analysis of the cost of new rails laid in replacement showed that the average cost per ton rose 85.3 per cent—from $43.26 in 1941 to $80.16 in 1950. Annual tonnages of the covered decade ranged from 1,192,225 in 1942 to 1,613,548 in 1945, and the annual charges ranged from 1941's $51.8 million to 1949's $98.9 million. The 1950 program involved 1,208,038 tons and charges totaling $96.8 million.

Another article had figures showing mileage of tracks operated by Class I roads, classified by kind of track and by districts. The figures, as of December 1, 1950, showed total trackage of 382,850 miles, of which 226,101 miles, or 59 per cent, comprised first main track. Second and other main track combined accounted for 10.6 per cent; passing tracks and cross-overs, 7.7 per cent; way switching tracks, 7.1 per cent; and yard switching tracks, 15.6 per cent.

By districts, percentage distribution of various classes of tracks differed considerably. In the East, first main track accounted for only 46.6 per cent of the total track mileage in that territory against 60.3 per cent in the South and 66 per cent in the West.

Cumulative percentage increases in freight rates since June 30, 1946—Important categories of commodities

Commodity group	United States [1]	Eastern district	Pocahontas region	Southern region	Western district [1]
Products of Agriculture (C.L.)	57.6	63.1	64.7	59.7	55.2
Grain and grain products	61.4	67.2	67.2	66.7	59.0
Citrus fruits	48.8	47.7	48.4	50.2	48.5
Other fresh fruits	47.6	49.4	54.3	51.0	45.5
Fresh vegetables	49.9	56.7	55.5	50.6	47.2
Other products	66.3	74.8	76.4	67.3	61.2
Animals and Products (C.L.)	71.0	78.3	78.5	71.1	64.9
Livestock	64.2	75.6	74.3	67.3	59.5
Meat and edible packinghouse products	74.6	79.3	79.8	74.0	69.2
Other animals and products	73.2	78.6	79.5	72.8	67.5
Products of Mines (C.L.)	53.5	55.2	53.5	54.4	49.3
Coal and coke	51.8	52.3	52.2	51.3	48.8
Iron ore	38.4	50.2	50.2	22.9	29.4
Other ores and concentrates	54.2	66.3	69.6	51.3	47.3
Gravel, sand, rough and crushed stone	70.0	76.6	76.8	72.1	62.3
Other products	65.4	72.2	68.5	66.0	59.0
Products of Forests (C.L.)	70.2	77.5	77.7	73.8	66.5
Logs, fuel, and pulp wood	71.1	79.1	78.9	74.7	65.2
Lumber (posts; poles; piling; ties; shingles; lath; box, crate, and cooperage material; plywood; building woodwork; etc.)	69.6	76.6	76.9	73.4	66.5
Other products	75.9	82.5	81.9	74.7	68.2
Manufactures and Miscellaneous (C.L.)[2]	76.1	86.1	85.8	72.6	66.6
Petroleum products	70.7	83.7	83.9	73.6	64.7
Vegetable oils	73.4	81.3	80.7	74.3	67.1
Iron and steel group	78.2	85.3	85.6	72.0	65.4
Aluminum, copper, lead and zinc metals and alloys	72.6	83.0	81.6	65.6	65.1
Cement, lime, and plaster	73.0	81.0	81.2	71.1	64.8
Brick list, drain tile, etc.	67.0	71.6	69.9	64.7	58.7
Sugar, sirup, and packaged foodstuffs	73.8	83.2	83.1	73.7	67.5
Other manfs. and miscs., and forwarder traffic	77.0	87.5	87.4	72.9	67.6
Less-Carload Traffic	77.9	87.1	87.1	74.3	67.4
Grand total, all traffic	67.1	73.2	67.0	67.0	61.5

[1] Does not include for any commodity or commodity group extra authorizations allowed on traffic in Zone 1 of western trunk-line territory.
[2] Includes forwarder traffic.

Railroading Plays Great Tactical Role in Korea

Railroading has played a greater tactical role in Korea than in any other conflict since the Civil War, according to Colonel E. C. R. Lasher, who returned recently from a year's tour of duty as transportation officer of the Eigth Army. Colonel Lasher discussed his experiences at an October 11 press conference.

He explained that the lack of reserves was the reason for the extensive tactical use of Korean railroads. It has often been necessary, as he put it, to do a makeshift job of moving available troops from place to place. He also noted that the Korean war generally has been a "war of movement," as the United Nations' forces have been fighting up and down the peninsula.

Thirty-five diesel-electric locomotives, with United States crews to run them, arrived in Korea last June, Colonel Lasher revealed. He estimated that these engines would do the work of about 150 Korean "tea kettles." The steam trains averaged about 20 to 25 cars, but the diesels could haul twice as many, Colonel Lasher said. He added that the average load there is 30 to 35 tons per car.

The steam locomotives are operated by Korean engineers, and one of the difficulties is the disposition of some of these engineers to stop off en route for visits with girl friends, the colonel also said. Engine riders are often used as expediters.

The principal railroad system of South Korea was described by Colonel Lasher as a road about the size of the St. Louis Southwestern, operating over terrain like that of Denver & Rio Grande Western territory. When the colonel left in August, the Military Railway Service had in Korea three battalions, including operating battalions sponsored by the Pennsylvania and the Reading, and a non-sponsored shop battalion which was assembled at Fort Eustis, Va.

The colonel also talked about other military transport in Korea, emphasizing that all modes are being used—"not on a basis of cost but on a basis of need." At no time, he said, did the Eighth Army lack for supplies, and transportation "had quite a role in that."

On September 25, Colonel Lasher was awarded the Legion of Merit for "astute planning ability and sound managerial judgment" which "contributed materially to the successful

prosecution of the campaign in Korea." After expiration of his leave, he will report to Fort Eustis as assistant commandant of the Transportation School. During World War II, Colonel Lasher served as deputy chief of the Transportation Corps' Traffic Control Division.

"Rails Face Greater Task Than in World War II"

The task that lies ahead for the transportation industry in the military and civilian phases of our economy may assume even greater proportions than was experienced at the peak of World War II, Donald V. Fraser, president of the Missouri-Kansas-Texas, said in San Antonio, Tex., on October 8. Speaking at the initial luncheon meeting of the National Defense Transportation Association's three-day annual convention, Mr. Fraser declared, however, that the nation is prepared, transportation-wise, for almost any eventuality.

Leaders from all forms of transportation were present at the meeting to explain their problems and to tell the status of their particular industry in the current military and civilian transportation scene. More than 600 delegates were in attendance, representing — in addition to air, rail, bus, truck and water transport — users of transportation, allied industrial representatives, and military services engaged in transportation. Mr. Fraser was speaking on behalf of all the nation's railroads when he said:

"The flexibility and availability of our rail system cannot be over-emphasized. In the event of enemy action, which would result in other channels of transportation becoming choked, trains will continue to move on their own rights of way under disciplined control. Because of the network of main and secondary lines, and available alternate routes, it would be difficult to completely block rail movement for any considerable length of time. This fact was proved by experiences in Great Britain during the last war."

Mr. Fraser pointed out that it is too often overlooked that railroads are no different than any other industry operating under the private enterprise system, for they too must make a reasonable profit and offer comparative security to investment capital. "There are two solutions to the railroads' problem," he said. "One is greater earnings on the present level of traffic, the other is a greater volume of traffic, or both. Only through public education and understanding . . . will come the necessary government action to, first, permit sufficient earnings for the railroads, and then to correct inequitable competitive conditions."

Other speakers on the three-day program were: Major General Frank A. Heileman, chief of transportation, U. S. Army; Rear Admiral W. E. Moore, assistant chief of naval operations; Rear Admiral L. S. Sabin, Jr., vice-commander, Military Sea Transport Service; Major General W. E. Farthing, director of transportation, U. S. Air Force; and Homer C. King, deputy administrator, Defense Transport Administration. Speaking for the transportation industry, in addition to Mr. Fraser, were Chester Thompson, president, American Waterway Operators; R. E. S. Diechler, vice-president —sales, American Air Lines; T. S. Reece, vice-president, Continental Bus System; and Leland James, president, American Trucking Associations.

The N.D.T.A. now has 61 chapters located in key cities throughout the U.S., plus several in Europe and in the Pacific Ocean region. The San Antonio chapter headed by Col. G. E. Wrockloff, president, was official host for the meeting.

Railroads Seek More Time On Uniform Classification

The railroads have asked the Interstate Commerce Commission to set back until February 1, 1952, the deadline for filing a uniform freight classification. The present deadline is December 1.

Filing of the classification was ordered by the commission in its July 26 report in the long-pending Consolidated Freight Classification proceeding, which is docketed as No.

Representing the railroads at the sixth annual meeting of the National Defense Transportation Association was Donald V. Fraser (third from left, above), president of the Katy. With him in this picture are Rear Admiral W. E. Moore, assistant chief of naval operations; C. F. Neilson, president of N.D.T.A. and director of parts and services, Lockheed Aircraft Corporation, and R. J. Morfa, chairman of the board of the M.-K.-T. A word of welcome to San Antonio for the more than 600 delegates came from Lieutenant General Le Roy Lutes, commanding general, Fourth Army area. Seated at the speakers table, from left to right below, are: Col. G. E. Wrockloff, president of the San Antonio Chapter, N.D.T.A.; C. F. Neilson, president of the association; Major General Frank A. Heilman, chief of transportation, U. S. Army; Lyle G. Bayless, vice-president, San Antonio chapter and representative, National Bus Military Bureau; and Col. Francis W. Crary, executive director of N.D.T.A.

"WHAT'S HAPPENING TO OUR RAILROAD COMMUTER SERVICE?"

What may have been the first use of television to bring a specific railroad problem to the attention of the public was tried out in Pittsburgh last month in a special telecast—one of a weekly series sponsored by the Pittsburgh Chamber of Commerce over station WDTV. Executives of three railroads which are seeking higher commuter fares in the Pittsburgh area—the Baltimore & Ohio, the Pennsylvania and the Pittsburgh & Lake Erie—reported a total out-of-pocket loss of $1,537,010 in Pittsburgh commuter service in 1950. They ascribed the loss to greatly increased costs of wages and materials and comparatively modest increases in fares, along with development of motor vehicles and highways and growth of suburban shopping and entertainment centers. To point up this loss they televised the specially prepared charts shown on the facing page, as well as a map of the Pittsburgh area (behind Mr. Rupp, above), showing how population has grown in off-rail communities and declined in those along railroad lines.

The television panel above included, left to right, Chamber of Commerce questioners Irving Bennett, John G. Praegner and Bernard J. McCrory; Vic Skaggs, WDTV director; Dr. Albert B. Martin, University of Pittsburgh political science professor, who acted as moderator; and E. S. Rupp, assistant to general manager, B. & O.; C. G. Stewart, general manager, P. & L.E.; and J. A. Appleton, vice-president, P.R.R.

28310. There was also a July 26 report in No. 28300, Class Rate Investigation, 1939, wherein the commission promulgated a uniform scale of class rates which it found just and reasonable for application in connection with the new classification. (*Railway Age* of August 6, page 41, and August 13, page 40.)

The railroads' request for more time on the classification was embodied in an October 11 letter to Commission Chairman Splawn. The letter was signed for western roads by H. C. Barron, counsel for the Western Traffic Association; for eastern roads by E. V. Hill, chairman, Freight Traffic Committee, Central Territory Railroads; and for southern roads by J. G. Kerr, chairman of the Southern Freight Association.

Considerable Work Remains

The letter referred to a discussion of the proposed postponement which Messrs. Barron, Hill and Kerr had with members of the commission's Division 2. It went on to say that the carriers have been working toward the December 1 deadline; but "there remains considerable work to be done."

A December 1 filing would require that final proofs be in the hands of the printer not later than October 25, the letter continued. It added that all necessary work cannot be completed by that time; so a December 1 filing must contemplate the filing of a supplement "containing many important changes." On the other hand, the letter assured the commission that "much of the uncompleted work could be done and included in the original Uniform Classification" if the proposed extension of time were granted.

The letter went on to express again the railroads' feeling that the new classification and the new class rates should be filed at the same time. "This," it added, "would greatly simplify matters in that the commission and shippers would be in possession of the classification and the new class rates at the same time, thus greatly reducing misunderstandings, thereby reducing protests and requests for suspension."

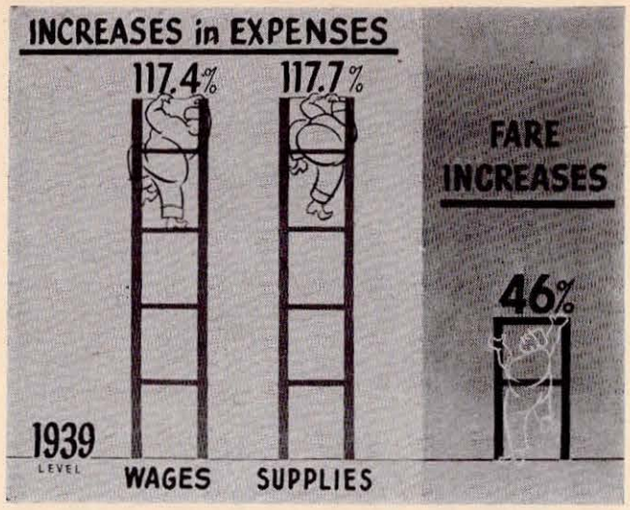
As to that, Messrs. Barron, Hill and Kerr also said it would be "physically impossible" to complete preparation of the new rate tariffs in time for filing by December 1. On the other hand, they believe that "much, if not all," of this work, as well as the work of preparing the classification, could be completed by February 1, 1952.

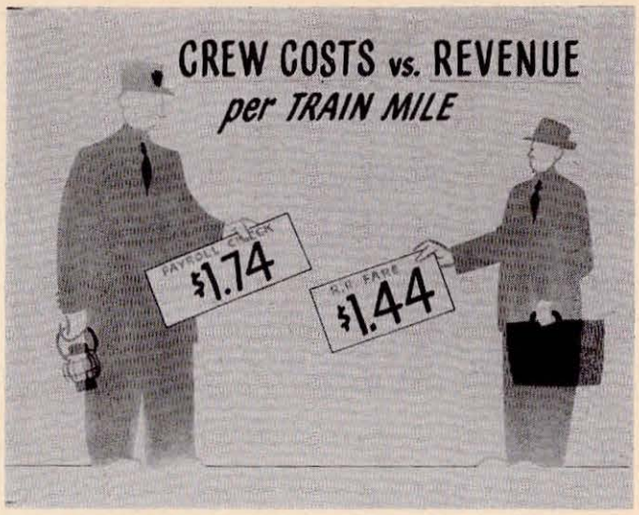
"No Laxity or Indifference"

"The suggestion for an extension," they continued, "does not indicate any laxity or indifference on the part of the railroads. To the contrary, the Uniform Classification Committee—as well as the several territorial advisory committees have been working diligently. . . . The same is true of the publishing agents in the compilation of the new class tariffs."

The letter also revealed the railroads' intention to make the new classification effective 120 days after filing. "This," it was explained, "is to afford shippers full opportunity to examine the new classification . . . and to file petitions for suspension of individual items in instances where they so desire."

In view of the "magnitude" of the new classification and the "revolutionary changes" involved, as the letter put it, the railroads "further suggest that all requests for suspension be made 45 days before the effective date" —this because "it will require at least





45 days for the carriers to analyze the requests for suspension, to prepare answers thereto, and to afford the commission time to consider and act on the petitions . . . and answers . . ."

Transport Legislation On Parliamentary Docket

(Special to *Railway Age*)

Transportation and power development are likely to receive a major share of attention at the present session of the Canadian Parliament, according to the opening "throne speech." Revision of the Railway Act is expected to be one of the big items on the legislative agenda, as is some action on the St. Lawrence seaway and power project and on the proposed $23 million rail-highway causeway across the Strait of Canso between the Nova Scotia mainland and Cape Breton Island (*Railway Age*, August 20, page 72).

Revision of the Railway Act in partial conformity with the recent report of the Royal Commission on Transportation (*Railway Age*, March 26, page 42), will probably be handled either by a standing or special committee of the House of Commons. The revision is likely to include enlargement of the personnel of the Dominion Board of Transport Commissioners; appropriation, on an annual basis, of approximately $7 million to aid the Canadian National and the Canadian Pacific in maintaining the unremunerative portions of their transcontinental main lines through sparsely settled far northwestern Ontario; reorganization of the C. N.'s financial structure; and some form of uniform accounting for the C.N. and the C.P.

Present indications are, however, that the federal government will "go easy" on the politically touchy matter of Dominion-wide freight-rate equalization, which would probably require higher rates in Ontario and Quebec to make up for reduced rates in Maritime, Prairie and Mountain provinces. The government may merely ask the Transport Board to continue and extend its present study of the rate problem; the board is now considering suggestions recently submitted by the railways.

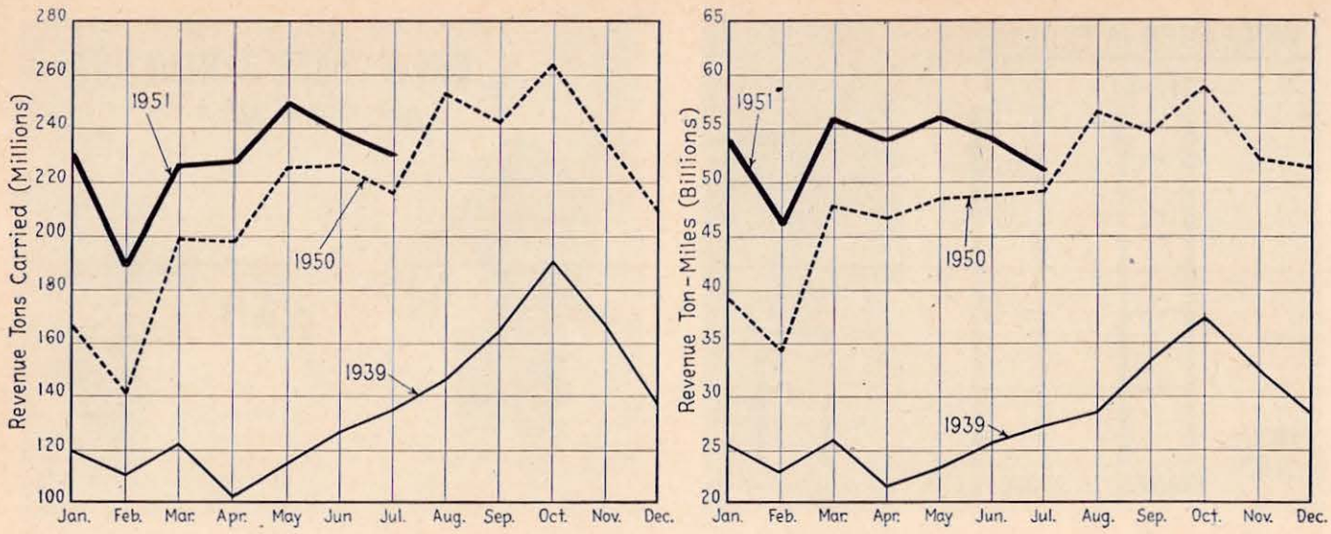
There is said to be little likelihood of any attempt to enact any degree of federal control over either interprovincial or international trucking.

Proposals for legislative creation of a federal government agency to deal with construction of the St. Lawrence project are reported, at least by opponents, to be "little more than a gesture," in view of the uncertainty about the attitudes of Quebec province and of the United States, and of the fact that "the prospect of Canada going it alone" is now understood not to be "as attractive to Canadian taxpayers as may be imagined in federal official quarters."

Freight Car Loadings

Loadings of revenue freight in the week ended October 13 totaled 868,683 cars, the Association of American Railroads announced on October 18. This was an increase of 9,933 cars, or 1.2 per cent, compared with the previous week; a decrease of 20,206 cars, or 2.3 per cent, compared with the corresponding week last year; and an increase of 284,735 cars, or 48.8 per cent, compared with the equivalent 1949 week, when coal and steel strikes were in progress.

Loadings of revenue freight for the



REVENUE TONS AND REVENUE TON-MILES—1951 compared with 1939 and 1950

week ended October 6 totaled 858,750 cars; the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS

For the week ended Saturday, October 6

District	1951	1950	1949
Eastern	143,373	145,949	111,632
Allegheny	171,166	174,796	90,504
Pocahontas	67,062	46,657	19,199
Southern	135,185	137,070	101,284
Northwestern ..	140,439	141,159	86,742
Central Western	135,369	135,512	121,419
Southwestern ..	66,156	64,760	43,448
Total Western Districts	341,964	341,431	251,609
Total All Roads	858,750	863,903	574,228
Commodities:			
Grain and grain products	54,192	51,200	51,919
Livestock	17,828	15,737	17,579
Coal	159,679	164,048	47,675
Coke	15,814	14,853	4,235
Forest products .	46,100	48,488	39,151
Ore	81,101	76,686	11,391
Merchandise l.c.l.	76,497	88,600	88,062
Miscellaneous ..	407,539	404,291	314,216
October 6	858,750	863,903	574,228
September 29 ..	864,573	88,186	658,128
September 22 ..	864,310	870,529	661,468
September 15 ..	850,812	866,658	743,022
September 8 ..	732,908	751,449	623,962
Cumulative total 40 weeks	31,200,998	29,362,762	28,387,206

In Canada.—Car loadings for the week ended October 6 totaled 88,068 cars, compared with 87,361 cars for the previous week and 89,277 cars for the corresponding week last year, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
October 6, 1951	88,068	34,359
October 7, 1950	89,277	35,597
Cummulative totals for Canada:		
October 6, 1951	3,200,461	1,383,845
October 7, 1950	2,925,620	1,237,110

Supreme Court Actions

At the first business sessions of its new fall term the Supreme Court has ruled on a number of transportation cases. Among them was one involving division of rates, two on terminal service, and two on passenger-train abandonments. Others concerned questions of segregation and unemployment compensation payments to men on strike.

The high court agreed to review one lower court's decision in the case of *Interstate Commerce Commission, et al, v. Great Northern.* In this case, where the Supreme Court noted "probable jurisdiction" the I.C.C. had prescribed joint rates on grain, in carloads, over the lines of the Montana Western and the G. N. The commission also prescribed a division of the joint rate between the two roads, the effect of which was to give an increased share of the revenue to the M.W. (*Railway Age,* September 2, 1950, page 96.)

The G.N. took the case to the U.S. District Court for the District of Minnesota. A three-judge court set aside the I.C.C. order. The G.N. contended the order was "arbitrary and capricious," and argued the commission had no authority to give weight to the financial needs of on of the participating roads in prescribing joint through routes and rates.

The lower court's findings said the I.C.C. order was "but a means to the end of assisting the Montana Western to meet obvious fina..cial needs," and concluded that such "is expressly prohibited" by the Interstate Commerce Act.

Terminal Service Cases

The high court upheld an I.C.C. determination that interchange tracks comprise a "reasonable point" for delivery and receipt of loaded and empty freight cars to an industry. This ruling was in *Chicago, Burlington & Quincy, et al, v. U. S. and I.C.C.,* and it upheld a lower court's decision which the railroads had appealed.

The I.C.C. order under fire was one dated March 12, 1951, involving John Morrell & Co. An allowance paid by railroads to cover intra-plant switching beyond the prescribed interchange tracks was found unlawful. The commission ordered such payments stopped, and said "reasonal y compensatory charges" must be added to line-haul rates to cover spotting and switching service if it is performed.

Four roads—C. B. & Q.; Chicago, Milwaukee, St. Paul & Pacific; Chicago, Rock Island & Pacific, and Wabash—took the matter to U. S. District Court. That court upheld the I.C.C., whereupon the case was appealed direct to the Supreme Court. There the I.C.C. filed a motion that the lower court's finding be affirmed and the motion was granted.

In the other terminal-service case—*Swift & Co. v. U. S. and I. C. C.*—the high court noted "probable jurisdiction" and agreed to review. In this case, Swift is endeavoring to compel railroads at Chicago to deliver livestock to its own sidetrack under the same line-haul rates applicable on livestock delivered "a few blocks away" to the unloading pens of Union Stockyards.

Passenger-Train Abandonments

In the abandonment cases, the high court reversed a U. S. District Court in Alabama. The Alabama Public Service Commission had refused to authorize the Louisville & Nashville to abandon non-profitable passenger trains on certain runs in that state, and the road obtained an injunction prohibiting the P.S.C. from enforcing its orders. The lower court, in granting the injunction, called the commission orders "confiscatory and unconstitutional."

Appealing to the Supreme Court for review, the P.S.C. said the railroad did not seek a rehearing from the commission or make its appeal in the state's courts, as required by state law. The commission also posed the question of whether the district court could make decisions on the constitutionality of P.S.C. orders when no attack was made on the constitutionality of the statutes on which such orders were based.

The Supreme Court, in its reversal, merely cited a decision of its 1950 term, involving similar passenger-train

abandonments on t'e Southern. In those cases the court ruled that the road should have appealed state commission actions via state courts. (*Railway Age*, June 4, page 66.)

Another case involving passenger-train service came before the court October 15. In *Florida Railroad and Public Utility Commission v. Atlantic Coast Line*, the court again held that appeal of state commission orders must be taken via state courts, rather than to U. S. District Court.

In this case the state commission denied the A.C.L. authority to substitute tri-weekly for daily service on two passenger trains between Lakeland, Fla., and Clewiston. The road went to district court and obtained injunctive relief from the commission order. The commission appealed, and the Supreme Court vacated the district court decision.

Compensation and Segregation

The unemployment compensation case, which the high court declined to review, grew out of a strike involving the Railway Express Agency in New York City in September 1950. R.E.A., charging the strike was "illegal under the Railway Labor Act," sought to enjoin payments by "'e Railroad Retirement Board to the men on strike. These payments were made under the Railroad Unemployment Insurance Act.

The Express Agency first wrote the board, protesting the allowance of unemployment benefits and asking to be heard on whether the strike, then in progress, was "legal." The board replied that the matter had been "properly adjudicated" and said the R.E.A. "had no standing to appear in such proceedings."

When the Express Agency sought relief in the U. S. District Court in Illinois, the court agreed with the board. The Circuit Court of Appeals affirmed this judgment. Both courts found that the insurance act "precludes judicial review" in the case and held that R.E.A. "lack standing to sue."

The segregation case, which the court also refused to review, involved the Norfolk & Western. The defendant, Rosa Charles, a Negro, sought damages in connection with being removed from a train at Roanoke, Va., after she allegedly refused to comply with the segregation law of that state. The trial court in Chicago found the N.&W. not guilty, but the Circuit Court of Appeals reversed this finding and remanded the case for a new trial. The N.&W. appealed this judgment to the Suprem. Court.

August Accident Statistics

The Interstate Commerce Commission has made public its Bureau of Transport Economics and Statistics' preliminary summary of "steam railway accidents" for August and this year's first eight months. The compilation, which is subject to revision, follows:

Item	Month of August 1951	Month of August 1950	8 months ended with August 1951	8 months ended with August 1950
Number of train accidents*	982	970	7,257	6,365
Number of accidents resulting in casualties	58	57	364	3.08
Number of casualties in train, train-service and non-train accidents:				
Trespassers:				
Killed	157	138	794	784
Injured	124	118	689	771
Passengers on trains:				
(a) In train accidents*				
Killed	4	1	96	40
Injured	125	114	1,103	875
(b) In train-service accidents				
Killed	1	5	14	17
Injured	158	188	1,185	1,306
Travelers not on trains:				
Killed	2	1	5	4
Injured	60	45	477	486
Employees on duty:				
Killed	40	31	250	209
Injured	2,061	2,022	15,381	13,321
All other non-trespassers:**				
Killed	105	140	1,037	1,011
Injured	421	515	3,781	3,706
Total—All classes of persons:				
Killed	309	316	2,196	2,065
Injured	2,949	3,002	22,616	20,465

*Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former caused damage of $275 or more to railway property in 1950. Beginning January 1, 1951, this minimum was raised to $300. Only a minor part of the total accidents result in casualties to persons, as noted above.

**Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties for all classes of persons, including both trespassers and nontrespassers, were as follows:

Persons:				
Killed	93	124	940	932
Injured	268	333	2,542	2,544

R.F.C. Sells Holdings In W.P. Preferred Stock

The Reconstruction Finance Corporation has sold its holdings of Western Pacific 5 per cent participating preferred stock. A total of 17,778 shares of $100 par value was involved in the sale. Winning bid for the block was made by Bear, Stearns & Co., with a top bid of $91.15 a share.

Rail Credit Cards Used In New Auto Rental Plan

An international charge card plan — similar to the rail travel credit system — has been placed in effect for auto rentals by the 520 members of the Hertz Driv-Ur-Self System, Inc. In announcing the new plan, Walter L. Jacobs, president of the system, said Hertz stations will honor rail travel credit cards and the credit cards of major airlines, as well as the system's own credit cards, under the new rental plan. With the credit card, he said, rentals will be made without cash deposit of any kind. No deposit or other "bond" will be required with application for the charge service, in which respect the Hertz plan differs from most other "charge it" operations now in effect in other industries, he added.

The new plan works like this: Anyone desiring charge card service applies directly to his local Hertz station. His application will be forwarded to the system's general offices in Chicago, where a credit bureau has been set up. After clearance, the charge card will be made out and sent back to the local station for customer delivery. Upon receipt of his card, the customer will then be able to rent a car from any member of the Hertz system with no formality other than presentation of the card. Upon completion of his auto trip, the customer will leave the car at the nearest Hertz station. The station from which the car was obtained will then be notified and will bill the customer. The service is similar for holders of rail travel credit cards and airline charge cards.

"We are instituting the plan primarily for the convenience of business executives and others who travel ex-

News Briefs . . .

. . . The New York Central's Putnam division was entirely dieselized on September 30. Nine 1,200-hp. diesel-electric locomotives, recently purchased for about $1,400,000, replaced steam locomotives formerly in service on the division. Dieselization of the Putnam division, the road explained, occurred earlier than in some areas of heavier traffic because its steam locomotive facilities must be torn down soon to make way for construction of a highway in the Bronx. All the division's locomotives henceforth will be serviced at Brewster.

The 103-mile upper portion of the Central's Harlem division, from the end of electrified territory at North White Plains to the northern terminus at Chatham, N. Y., is scheduled to be completely dieselized in 1953.

. . . There is still time for railway supply advertisers to submit their entries to the "First Annual Advertising Competition," being sponsored by the Association of Railroad Advertising Managers, before the closing date of November 15. Ad proofs for the period November 1, 1950, through October 31, 1951, will be considered in the competition. Details of the contest were described in *Railway Age* of February 12, page 128, or may be obtained through the association's assistant secretary, C. D. Perrin, 85 West Harrison street, Chicago 5.

. . . A new streamliner now links Cleveland and Cincinnati, the two largest cities in Ohio, with inauguration of the New York Central's Cleveland-Cincinnati "Mercury" on September 30 coincident with the change from daylight to standard time. The new train leaves Cleveland at 7:40 a.m., reaching Cincinnati at 1:50 p.m. Returning, it leaves Cincinnati at 5 p.m., reaching Cleveland at 10:50.

tensively," Mr. Jacobs declared. More than one-third of the system's business, he said, comes from travelers who start their trips by train or plane and who use rent-a-car services at the point of arrival. (*Railway Age*, September 24, page 62.)

Elmer J. Stubbs Heads D.T.A. Rail Division

Elmer J. Stubbs, assistant vice-president of the Erie, has been appointed director of the Defense Transport Administration's Railroad Transport Division. He succeeds G. H. Minchin, who resigned to return to his former position as senior vice-president of the Atchison, Topeka & Santa Fe.

While serving with D. T. A., Mr. Stubbs will be on leave of absence from his Erie position, which is in that road's operating department. The D. T. A. announcement of his appointment included this statement from Director James K. Knudson:

"The D. T. A. is fortunate to be able to secure the services of a man of such broad experience and knowledge of railroading as Mr. Stubbs. The action of the Erie in making a loan of the services of Mr. Stubbs at this time is appreciated."

Mr. Stubbs was born February 16, 1890, at Lewisburg, Ohio, and received his higher education at Ohio Wesleyan University, Ohio State University, and Ohio State Medical School. The Erie has issued a review of his career

Elmer J. Stubbs

which explains that he did not follow through on plans to enter the medical profession because "railroading got into his blood and he forgot about medicine."

Mr. Stubbs has been with the Erie more than 38 years. He entered its service in May 1913, as clerk and assistant agent at Essex Fells, N. J., and Pompton Junction. Thereafter, he progressed through various clerical positions in New York and Oil City, Pa., until 1917, when he became agent at Falconer, N. Y. Later that year, he returned to Oil City as freight agent, and then became relief agent on the Meadville division. He was freight agent at Akron, Ohio, from 1920 until 1928, when he was transferred in like capacity to the Erie's Duane Street station in New York.

The following year, in 1929, Mr. Stubbs was promoted to assistant superintendent of terminals; and in 1933 he was transferred to Cleveland as chief clerk in the transportation department. He became superintendent of transportation in 1936 and general superintendent of transportation in 1949. He has been assistant vice-president since September 16, 1950.

Wildcat Strike Halts Inland Steel Plant

A "wildcat" strike growing out of a walkout of less than 100 employees has halted operations of the Inland Steel Company's Indiana Harbor, Ind., plant and has idled more than 18,000 Inland employees. For each day the strike continues, 10,760 tons of ingot steel will be lost to the nation's mobilization effort. Officers of the United Steelworkers of America local said the strike was "unauthorized" and that they were "powerless" to help in matters such as maintenance of the plant's equipment.

D.P.A. Announces C.M.P. Allotments For 1st Quarter

The railroad program has been allotted 1,640,750 tons of steel, 86,360,000 pounds of copper and copper base alloys, and 6,000,000 pounds of aluminum under the Controlled Materials Plan for the first quarter of 1952. This and other first-quarter allotments were announced October 12 by Manly Fleischmann, administrator of the Defense Production Administration.

A statement issued October 16 by N.P.A. said that the allotments would permit production in the first quarter of the following: 18,000 domestic freight cars; 2,000 domestic tank cars; 250 domestic industrial cars; 1,200 freight cars for export; 636 domestic locomotives; 60 locomotives for export; 50 industrial locomotives; 54 Army locomotives; and 332,000 tons of rail for maintenance, repair and operating supplies.

The statement said this program had been outlined by N.P.A. officials at an October 16 meeting with the advisory committees representing the railroads and the contract car builders. The first-quarter allotments represent a reduction from those of the current quarter which contemplate production of 27,000 cars, including 2,500 tank cars.

"The carbuilders said the reduction will cause serious losses of skilled manpower in their industry," according to N.P.A.'s report of the meeting with the advisory committees. The report added:

"Due to their inability to place many authorized controlled materials orders on mill schedules, the car builders said unbalanced inventories have been created. They said the industry has no excess inventories.

"It was reported that orders for about 150,000 tons of materials allotted to the railroad industry could not be placed on mill schedules during the fourth quarter. N.P.A. said its Railroad Equipment Division has appointed an expediter to help manufacturers place authorized controlled materials orders.

"The railroad operators urged that there be no prohibition on the use of galvanized steel sheet for freight car roofs and running boards. Discussing the shortage of steel for the industry, the operators pointed out that railroads place 1½ lb. of scrap into trade channels for every pound they consume."

Other allotments announced by Mr. Fleischmann include those to the Bureau of Public Roads—201,520 tons of steel, 900,000 pounds of copper, and 250,000 pounds of aluminum.

Second-Quarter Truck Traffic Up 10.2 Per Cent

The freight volume handled by Class I intercity motor carriers in this year's second quarter was 10.2 per cent above that of the comparable 1950 period, according to figures compiled by the American Trucking Associations.

This marks the seventh successive year that a second quarter gain has been made over the second quarter of the preceding year, A. T. A. reported. The 10.2 per cent jump this year compared to an increase of 27.6 per cent in the second quarter of 1950 over 1949.

Figures compiled by A. T. A. were based on returns from 1,353 trucking companies which carried 45,181,639 tons of intercity freight in this year's second quarter. The comparable figure for the second quarter of 1950 was 41,007,853. The A. T. A. index, based on 1941 as 100, was 238 for the second quarter as compared with 216 last year.

Tonnage for 1951's second quarter was down slightly from the 45,868,372 tons reported for the first quarter by A. T. A. However, this year's first quarter was up 24.6 per cent over the same period last year.

MORE NEWS ON PAGE 58

Additional general news appears on page 58, followed by regular news departments, which begin on the following pages:

Organizations	**60**
Equipment & Supplies	**60**
Supply Trade	**61**
Car Service	**61**
Construction	**62**
Financial	**62**
Railway Officers	**62**
Abandonments	**74**

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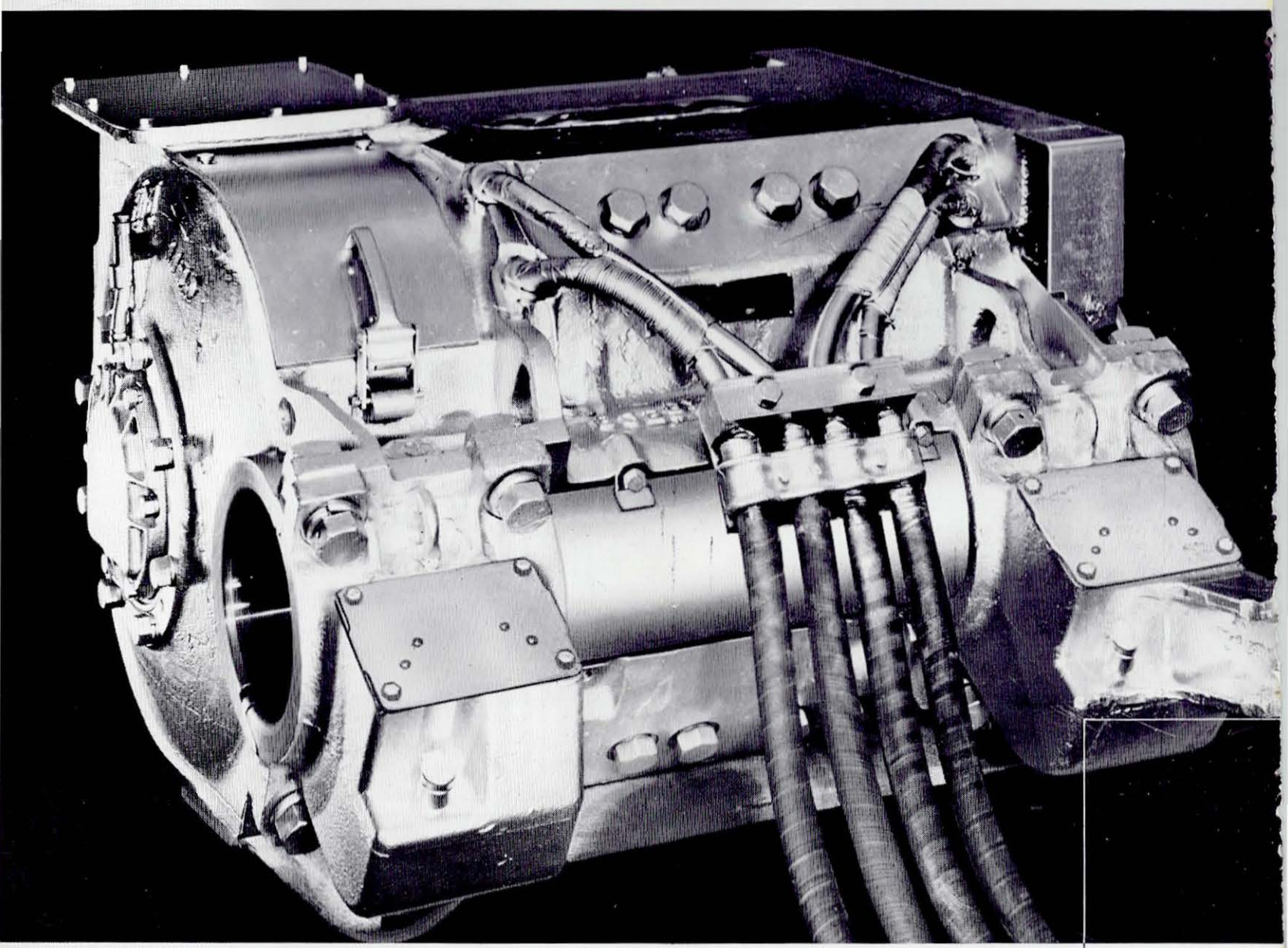

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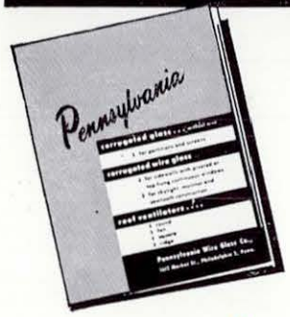

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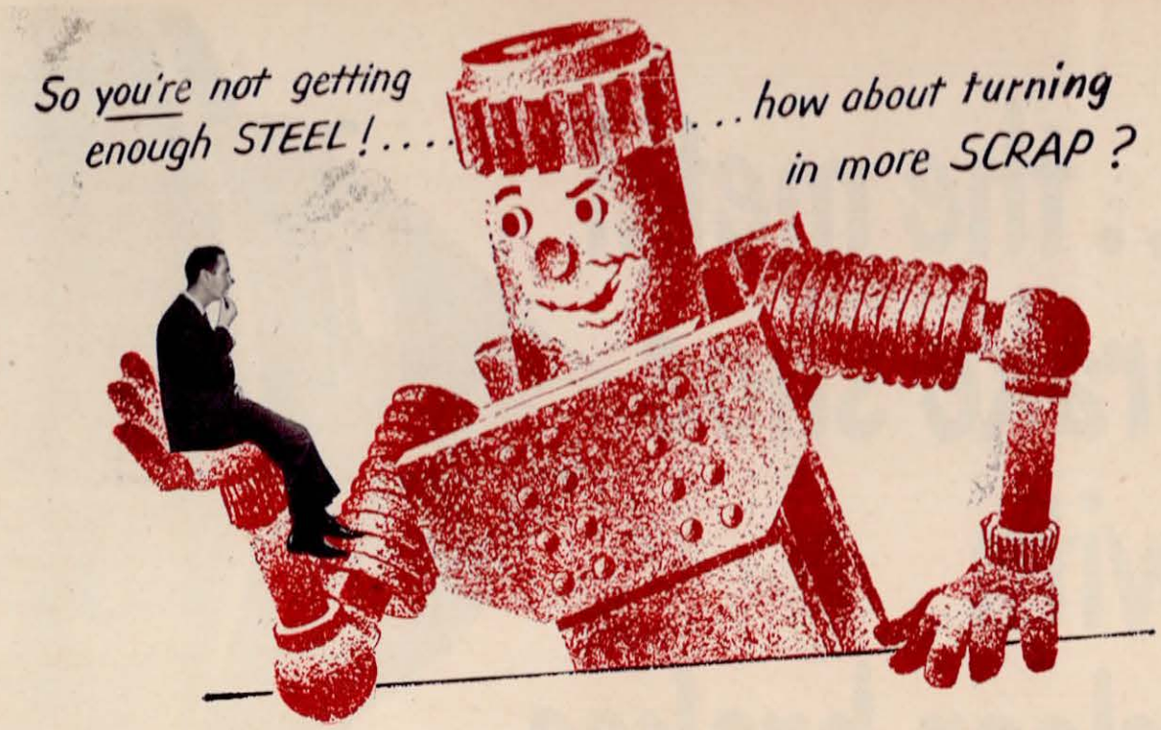

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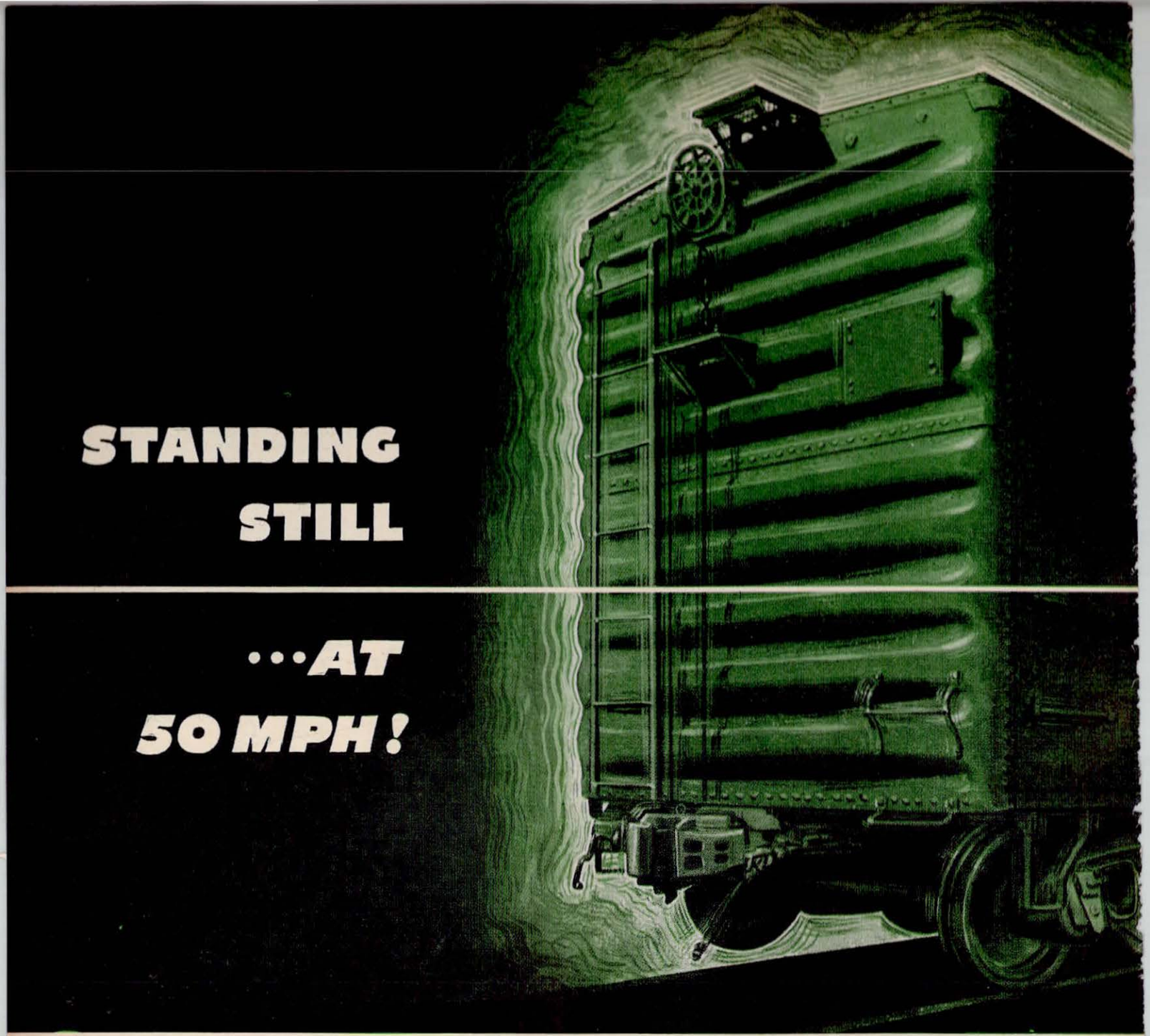

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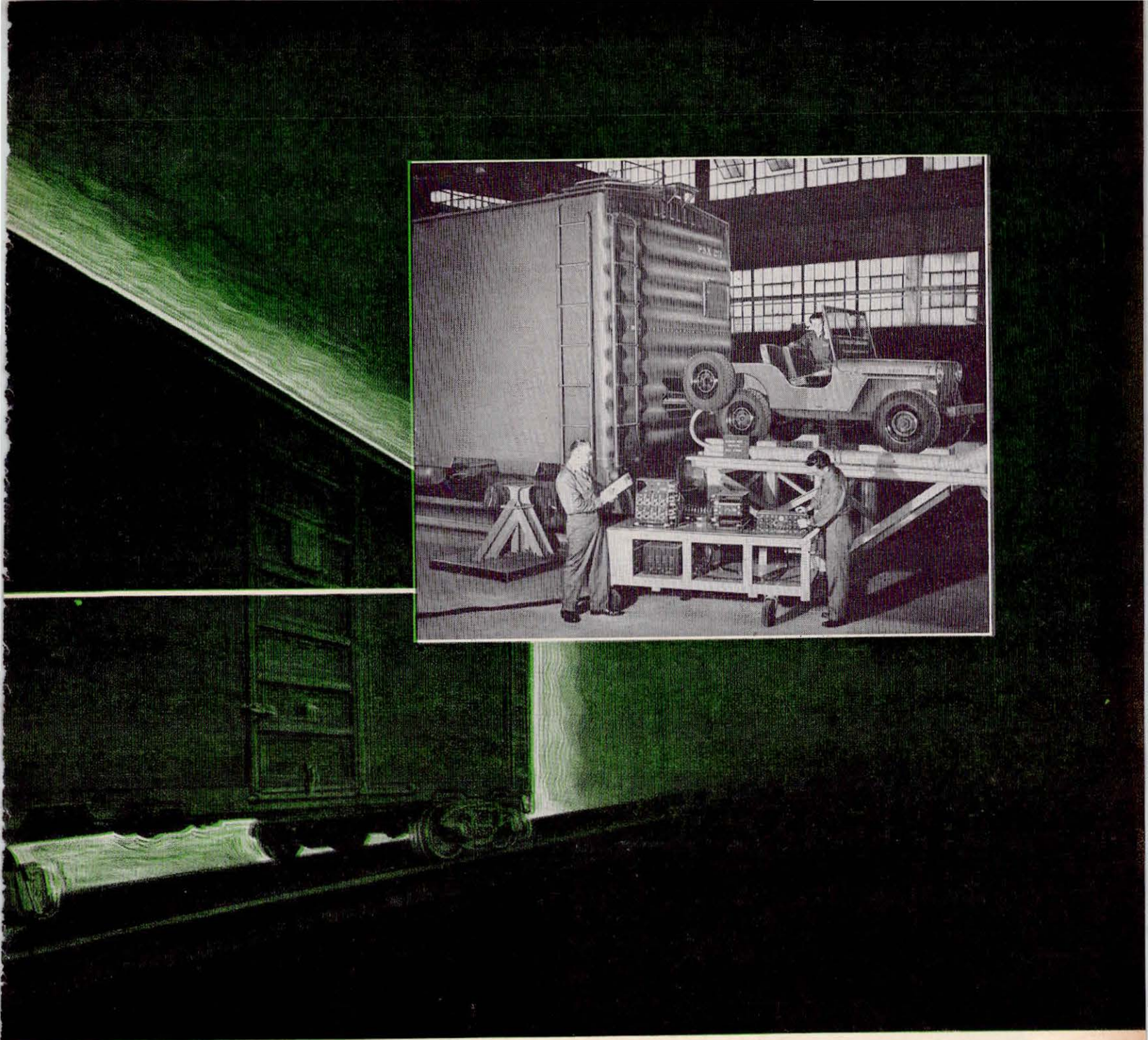

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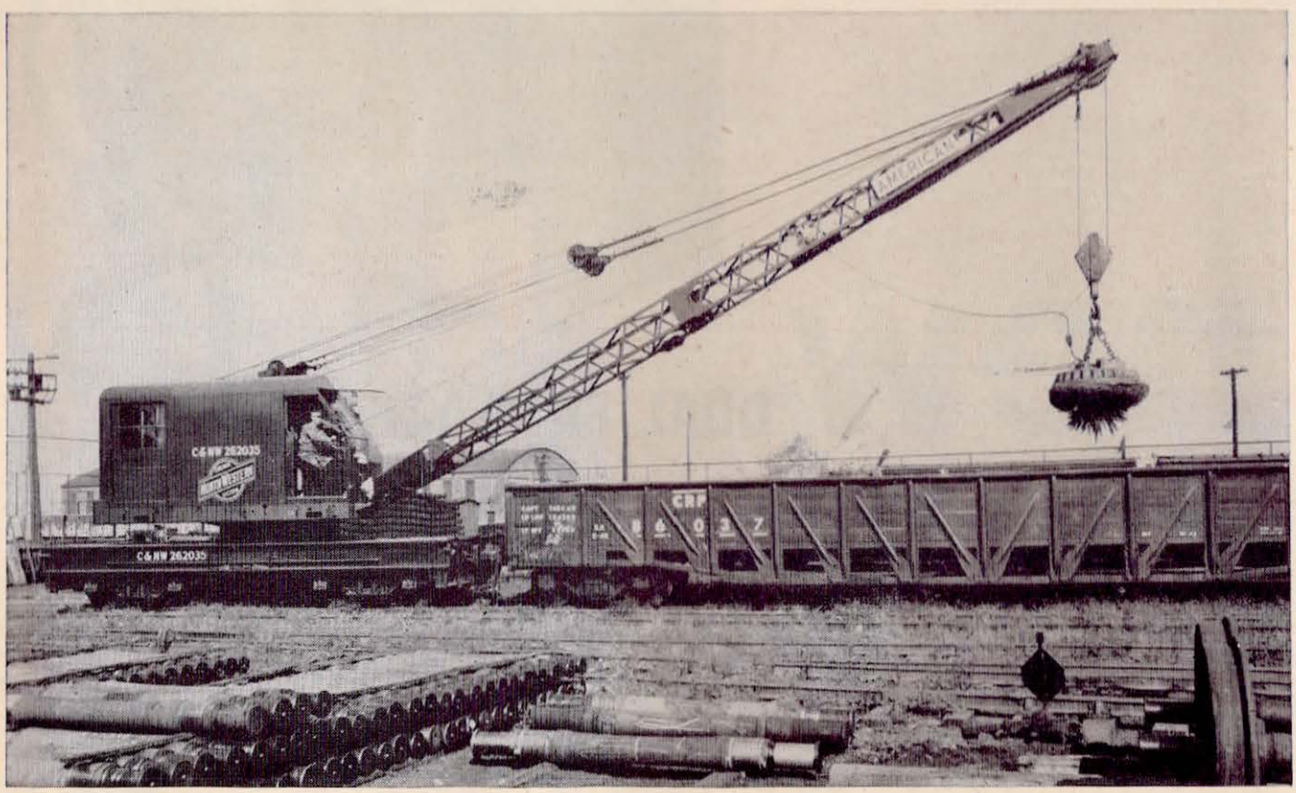

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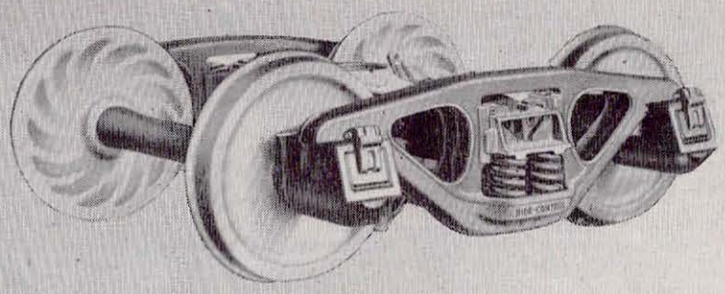

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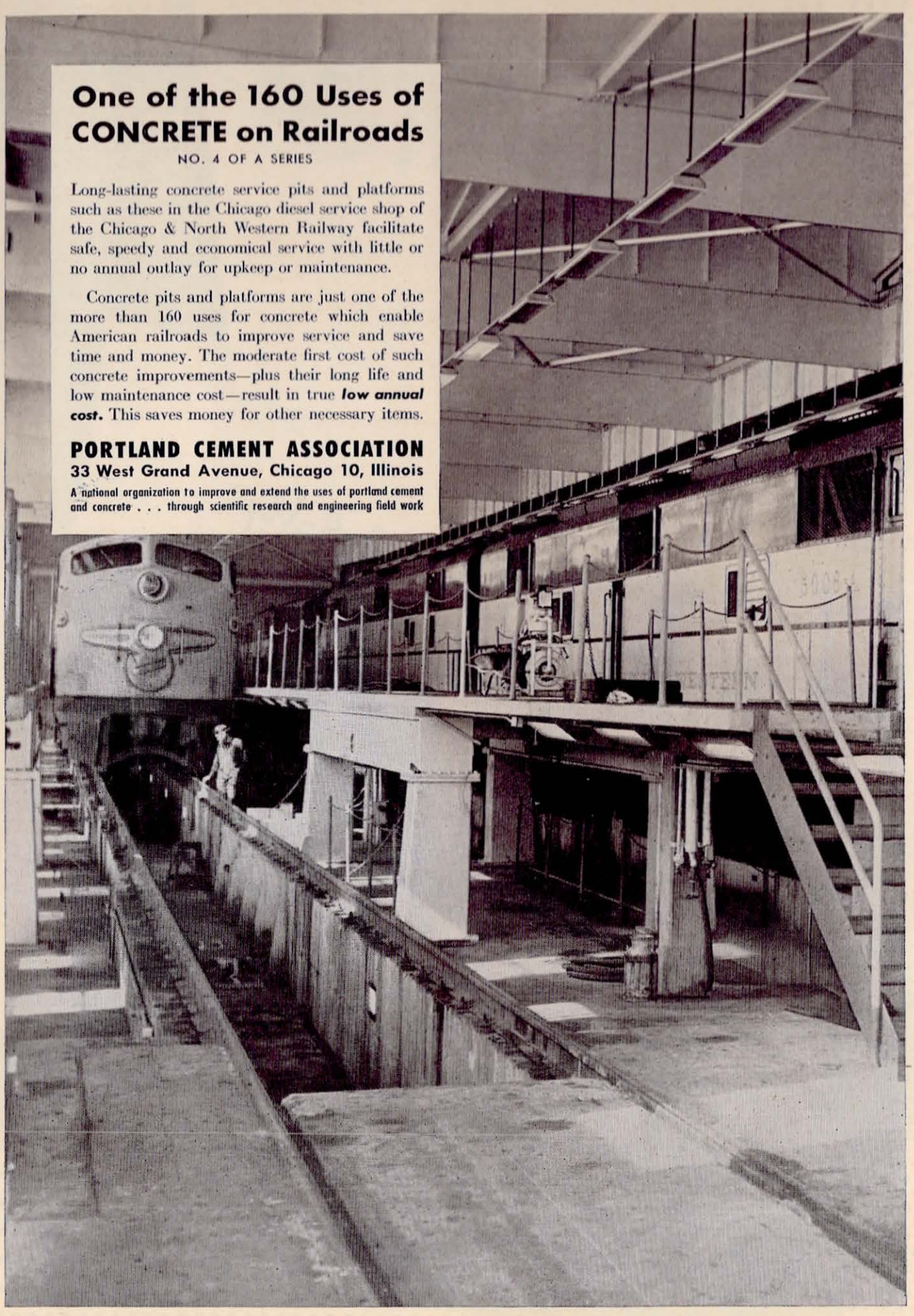

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The Telephone Case

Take the telephone industry in New York, for instance. The state public utilities commission has recently handed down a decision in a rate increase proposed by the New York Telephone Company. The commission, to be sure, disapproved the higher rates the company sought, but it looked with approval upon a return to the company of more than 6 per cent on property investment, less depreciation and plus working capital. The company had earnings at the annual rate of 6.8 per cent in the first half of 1951. A comparable rate basis for the railroads in 1950 would have given them $1,676 million of net railway operating income—or $636 million more than they actually earned.

The decision in the New York Telephone Company case, the newspapers report, does not please the company. Perhaps an appeal may be taken to the courts. The decision reviews some pretty persuasive arguments by the company for more liberal treatment than it got—e.g., especially for more generous provision for depreciation, to take care of replacing worn-out machinery at inflated prices. Whatever be the validity of this contention, it can nevertheless be asserted, if this decision treats the telephone company parsimoniously, then the railroads would be mighty lucky to be treated with equal stinginess. As a matter of fact, railroad earnings since World War II—at the average rate of 3.5 per cent on the depreciated investment plus working capital—have been at just about half the rate which the telephone company has enjoyed under state regulation.

The report of the state commission in the telephone case is a model for brevity, for clarity of reasoning, and for forthright facing of the issues. In discussing the "standard of required earnings" the report says "no better or more succinct test has been called to our attention than the time-tested one that *'a utility is entitled to earn a sufficient sum to attract capital to the enterprise'*." Of how many railroads could it be said that their earnings have been sufficient since World War II to meet that simple test—except, of course, for equipment obligations which are given such a preferred position creditwise that even bankrupt properties can sell them?

In dealing with the fact of inflation, and resulting depreciation charges which return only the original cost of the plant to be replaced, the commission argues that it is impracticable to revalue the company's assets from day to day—"if it were within our power to insure utility investors against inflation, we would simply create a class who would have no interest in combating it and who might even profit by it." At the same time, however, the commission concedes that, "*there must be reflected in the rate of return a sufficient amount to meet the competition of the money market*"—that is, enough to make utilities securities as attractive to investors as the securities of unregulated industries. Probably some telephone people may question whether the commission has, in this case, made sufficient allowance to attain this objective. If the figures actually turn out that way, then the company will have a strong case with which to return to the commission—because its expression in favor of keeping the company's securities attractive to investors is unequivocal.

The fact is that inflation is continuing in this country because it works to the advantage, at least temporarily,

of some favored groups. The easiest and soundest way to stop it would be to minimize the people who gain by it. But, if it is not stopped, then regulatory bodies, unless they are going to destroy the industries under their guardianship, must permit them to raise their rates, at least to the extent necessary to keep the securities of these industries attractive to investors. The utilities which are regulated by state commissions which give full recognition to this principle are certainly fortunate, as any railroad man could tell them.

The crisis confronting the railroads is one involving the supply of capital—this aspect not being generally recognized because of the peculiarly favorable devices available for attracting capital for new equipment, and very little else. The railroads have thus far done very little to interpret their problem—either of rate regulation or of competitive inequality—in terms of capital supply, which is an honest yardstick and easily understandable: or, at least, is more readily understandable than appeals to such abstractions as "fair," "reasonable" and "just," about which every man has either a different opinion or no concept at all.

What Railroads Must Have

What the railroads have got to have is enough investment money to keep their properties equipped in as modern a manner as the "state of the art" permits, and sufficient capacity to meet all reasonable demands for service. Unless the Interstate Commerce Commission and other regulatory, administrative and legislative bodies are going to mitigate their controls to the extent required to enable the industry to attract the necessary investment capital, then the railroads will have to seek financing at the hands of the federal government. That is the brutal and inevitable fact which no amount of wishful thinking will destroy. If the railroad crisis were forthrightly presented in such terms, probably even the protagonists of the sheltered agencies of transportation could be brought to understand where their true interests lie. Nobody except Joe Stalin has anything to gain, in the end, from the perpetuation of the intolerable political jungle which has grown up around the railroad industry —a jungle which gets treated as sacred because every tree in it has carved on its trunk the name of some individual with a vested interest.

BETTER NOT DONE AT ALL THAN HALF DONE

A safety device can be effective in preventing accidents and still do more harm than good. This apparent contradiction of logic exists where a safety device provides some protection against some accidents, but gives workers a false feeling of security or overconfidence in the device's ability to protect them against all accidents.

A case exemplifying such a paradox can be found in a number of diesel shops. Safety chains on the platforms are often weak and mounted too low with respect to the walking level, particularly in the center of the span between adjacent supports where the chain hangs the lowest. There is no doubt they are capable of preventing many accidents, that they can serve as a convenient handhold for some working operations, and that they are strong enough to permit a man to lean against them.

Where they hang hip-high in the center they might serve particularly well in preventing a man from falling straight down into the pit. Should he lose his balance leaning against one, or back into one, unconsciously, however, they would function very effectively to up-end him, assuring that he would land in the pit on his head rather than on his feet.

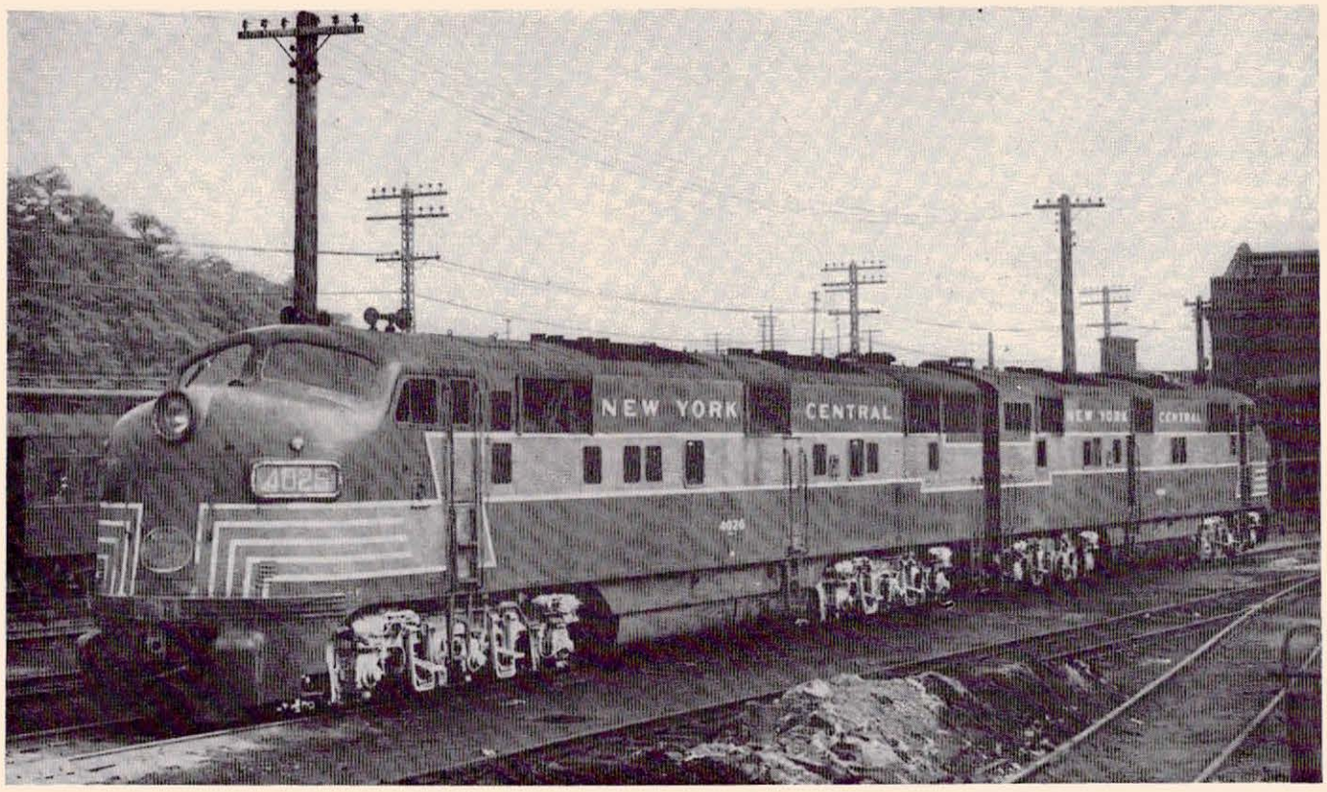
So far as is known, no serious accidents have resulted from such installations. However, the potential hazards that exist at many diesel shops are noticeable. They should be removed before luck runs out.

STUDY IN CONTRASTS

"County . . . and [city] officials . . . who have been informed of plans for lengthening a runway at Allentown-Bethlehem-Easton airport . . . and installation of an instrument landing system, are confidently expected . . . to place their approval on the project . . . United Air Lines and T.W.A. intend to place larger planes on these runs and such planes need the facilities planned. . . . It is necessary and essential to maintain the airport . . ."—*Easton, Pa., Express, August 9.*

"Earl S. Kester, president of the Chamber of Commerce . . . criticized the condition of the railroad stations and said a union station was needed that would be a credit to the city. . . . Both stations are not comparable to the progressiveness of Allentown. . . . Many persons are thoroughly convinced that the Valley Station and the Central Terminal should be dismantled and a union station erected in their place."—*Allentown, Pa., Sunday Call-Chronicle, July 8.*

The airport extension would cost about $900,000; 50 per cent of that amount would be paid by the federal government, 25 per cent by the state of Pennsylvania, and 5 per cent each by Northampton and Lehigh counties and the cities of Allentown, Bethlehem and Easton. Principal beneficiary would be T.W.A.—which could make more money by operating larger planes. A new railroad station at Allentown would cost over $1,000,000—to be paid for entirely by the Lehigh Valley and the Central of New Jersey. Principal beneficiary would probably be the local tax collector! Yet only one newspaper in the three cities has, as yet, seen fit to print a letter from Russell Erickson, L. V. director of public relations, explaining why a new station would not be a "good investment" at this time.



One of the diesel locomotives used in the New York Central wheel-slip investigation

Surprising Facts Disclosed by Diesel Wheel-Slippage Investigation

New York Central obtains recordings which indicate that more attention to this subject will improve operation and reduce maintenance costs

By F. THOMAS
Assistant to General Superintendent, Equipment, Diesel-Electric
New York Central System

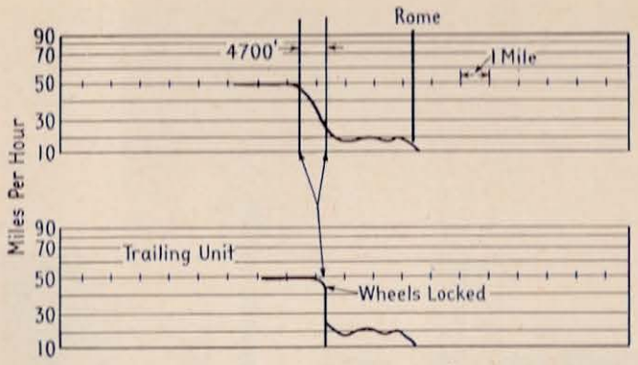
The New York Central has been conducting an investigation of diesel wheel slippage that has continued since the early part of 1946. Much valuable data has been accumulated and a number of railroads have been sufficiently interested in the results to ask for copies of the data. This paper is a résumé of the tests.

The investigation of wheel slippage was started when analysis of unexplained motor difficulties, flashovers and other troubles associated with the tractive equipment of our diesel-electric locomotives pointed to wheel slippage as a contributing factor. There were numerous observations of loss of power on the ammeter that were eliminated by momentarily notching back the controller—indicating that wheel slippage existed, even though the wheel-slip light did not operate. There were other instances on the road where the wheels were observed to be slipping without operating the wheel-slip light.

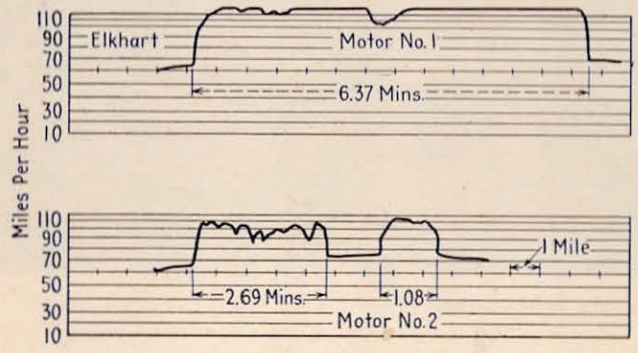
* This article is adapted from a paper presented before the Locomotive Maintenance Officers' Association meeting in Chicago, September 17-19.

To check further on the possibility of wheels slipping without operating the wheel-slip control circuit, we examined a number of tapes from speedometers driven by power axles of freight locomotives. The wheel slip relay in use on the units at that time obviously did not function on many of these slips. There were also cases where severe rail damage occurred, because enginemen permitted wheels to slip unknowingly while trying to start a train.

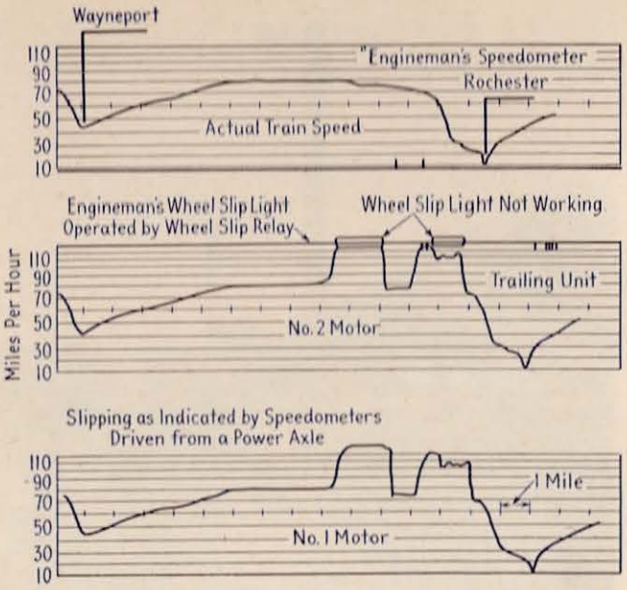
The next step in the investigation—about September 1948—was to change the drive of the recording speedometer from the idler axle to the No. 1 power axle on



Example of wheels locked during braking possibly due to simultaneous use of dynamic and independent air brake on a freight locomotive. (Train No. BC-1, Division—Mohawk, direction—westbound, leading unit)



Another example, near Elkhart, Ind., shows a wheel spinning 6½ min. at more than 120 m.p.h. for a tread distance of about 14 miles. (Train No. 68, Division—West Toledo, direction—eastbound, leading unit)



These tapes show examples of simultaneous slippage of the two motor-driven wheels in the same truck. (Train No. 1, division—Syracuse, direction—westbound, leading unit)

two passenger units for test observation. It was assumed this pair of wheels had frequent slippage and would give a good speedometer tape record of any slipping condition. The records of wheel speed during the next several months showed that the extent of wheel slippage was even greater than expected.

There were numerous instances in regular service where the slipping wheel spun to speeds in excess of 120 m.p.h., which was the highest the recorder would register. Continuous slippage at such speeds occurred for distances as great as 34 miles as measured on the tread of the slipping wheel. Recorder tapes were obtained where a pair of slipping wheels in effect traveled as much as 60 additional miles in a single division of 146 miles.

Continuing the investigation, a second recording speedometer was added to the diesel units at the axle powered by No. 2 traction motor (March 1949). This recorder was equipped with an extra pencil to register operations of the wheel-slip light circuit. From the second recorder, it was possible to determine whether or not simultaneous slippage of driving wheels in the same truck occurred frequently. This was found to be the case. It was also determined that the wheel-slip circuit often did not function and no light warned the engineman.

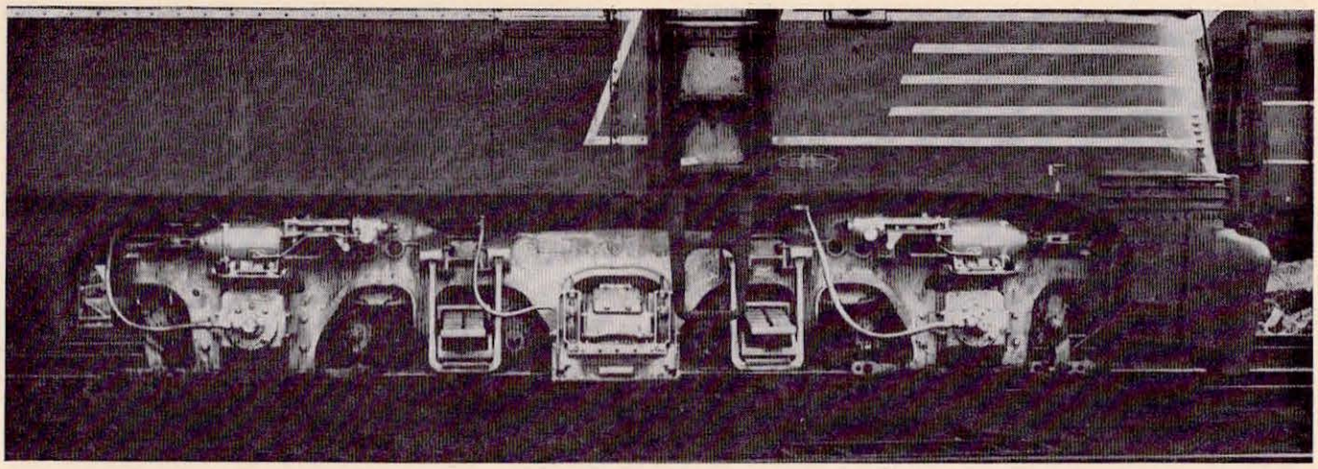
These phases of the investigation extended from early 1948 through 1949. In August 1950 the other two driving axles of the diesel units were equipped with recording speedometers. Throughout the investigation, considerable work has been done on a number of types of wheel-slip relays and their connections. In fact, the New York Central has tried all the slip relay combinations suggested by manufacturers. At present, there are more than 20 diesel units on the New York Central operating with experimental wheel-slip relays.

While some improvement has been obtained in wheel-slip detection, the results by this method are still far from satisfactory, particularly at high speeds. We have about reached the conclusion that the sensing of wheel slippage by relays in the motor circuits is fundamentally unreliable for certain conditions, including wheel slide.

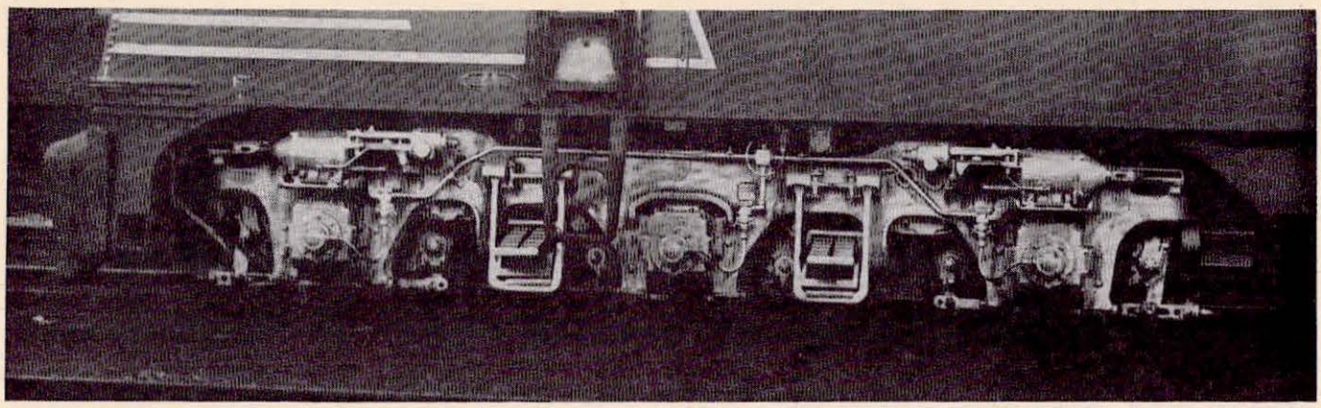
We had been investigating various types of slip relays for about four years when the Association of American Railroads committees directly interested in diesel locomotives were asked by the Interstate Commerce Commission to investigate devices which would sound an alarm if a wheel became locked. This condition had caused several accidents. It was suggested that such wheel protective equipment should be independent of the circuits on the unit, so that wheel protection would be maintained at all times, even when the power plant was cut out.

In January 1950 the A.A.R. Electrical Section subcommittee went on record that: "It was the opinion of the committee that a device for protection of wheel slide should also incorporate protection for wheel slip with a view not only to simplifying equipment on the locomotive but that a device actuated by the action of the wheel itself would be more reliable than the present type of wheel-slip protection or other devices that are not directly actuated by the rotation of the wheel."

Among the several devices suggested to the committees was a wheel-control equipment which had been used for a number of years on passenger cars to protect wheels from sliding during braking. It appeared that an adaptation of this wheel-control equipment could be made to afford the desired locked-wheel alarm for all wheels and in addition provide an improved spin detection and an indication of wheel slide from braking. This equipment is comparatively simple and consists of a commutator-type rotary switch driven from each axle, and a control with one relay per pair of wheels protected.



The recording speedometer drives as installed at each driving axle on the locomotive to obtain a continuous test record of wheel behavior. (Locomotive No. 4026)



The axle-driven wheel controller rotary switches as installed to protect each pair of wheels on the locomotive. (Locomotive No. 4026)

The New York Central agreed to apply that equipment to two diesel units for test report results to the A.A.R. committees. The Pennsylvania and Chicago & North Western have also tested similar equipment.

The test of the equipment was considered by the New York Central as a continuation of the original spin investigation. This wheel protective device was applied in September 1950 to one of the diesel units equipped with recording speedometers on each power axle. To date, this wheel protective equipment has been in operation for approximately 298,047 miles on one unit and some 239,975 miles on the other. These units have received only routine service attention.

The test of this wheel protective device was in two parts. First, the wheel control recorded its detection of slips or slides on the speedometer chart, but was not connected to actuate the locomotive slip control circuit. This proved the reliability of the device, as all slips exceeding 7 m.p.h. were detected.

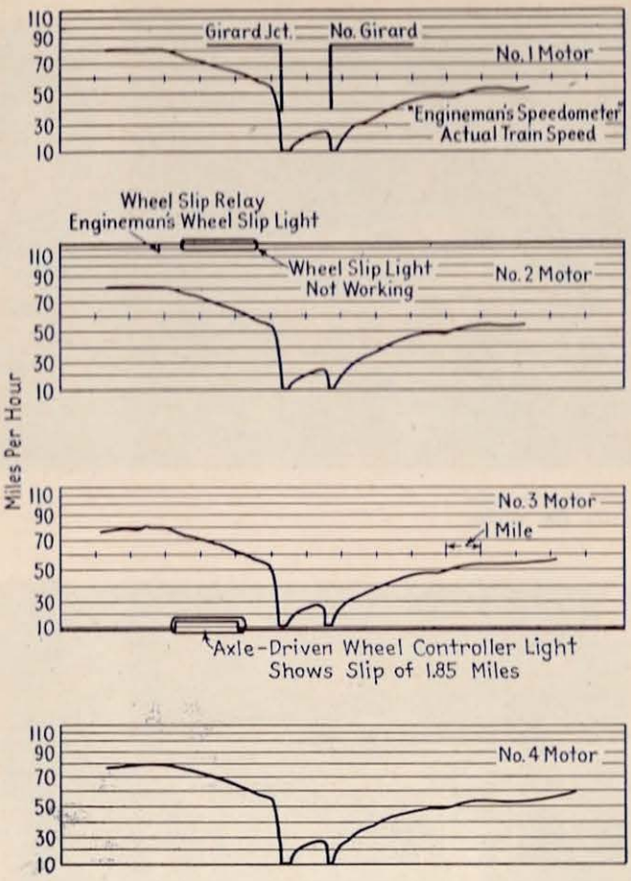
During the six months trial period (September 16, 1950, to March 26, 1951) records were taken from 173 runs. In this service, the wheel controller on test detected all slips, totalling 3,919. The regular slip relay of the newest type detected 1,033, 26 per cent of the total, leaving the locomotive without spin protection for 74 per cent of the slips which occurred. In addition, the wheel-control device indicated a case of locked wheels caused by an armature band wire failure, and a case of sliding wheels due to braking.

During the second part of the test, the wheel-control device was connected to actuate the locomotive slip-control circuit. Also in this phase of the investigation, several variations of the slip control itself were tried to determine what improvements, if any, could be made in the control of slips after the condition was positively detected by the wheel controller.

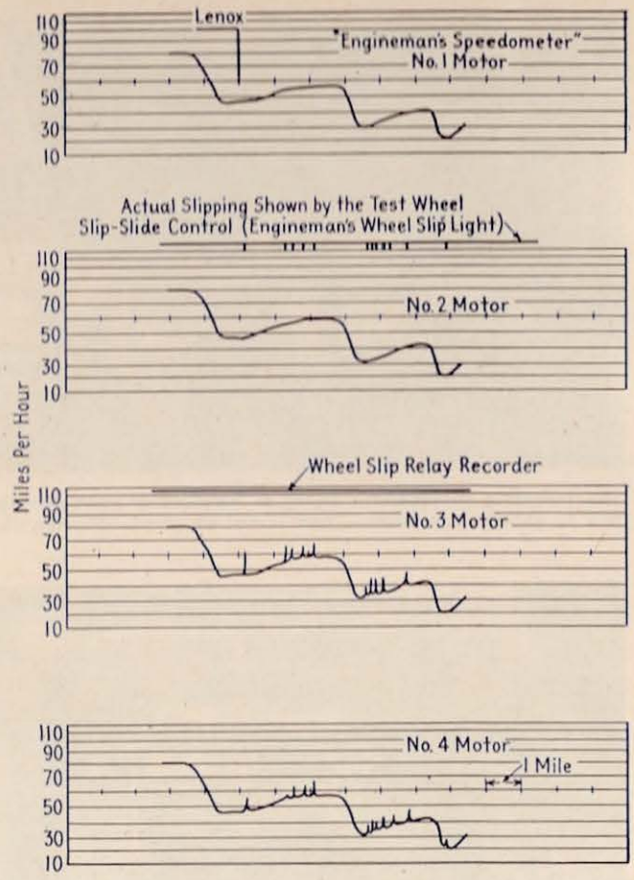
First, with the wheel-control device operating in place of the regular wheel-slip relay, but with the locomotive slip-control circuit otherwise the same, the records indicated that all slips were controlled before the wheel spin exceeded rail speed by about 10 m.p.h. The duration of a slip control was about two seconds. Usually, there was no operation of the wheel-slip relay, which was disconnected from the locomotive control circuit and attached to a pencil on the speedometer chart. The failure of the wheel-slip relay to function probably was due, in many cases, to the prompt detection of the slip by the axle-driven device.

With this arrangement, however, the records showed the wheels often slipped again as the power was reapplied after a spin correction. On one occasion, with the locomotive operating between 60 and 70 m.p.h., it was necessary to control 296 slips in 28 miles. We believe this was due to the arrangement of the locomotive circuit, which permitted reapplication of full power too soon after a slip correction.

As another step in the investigation, means were applied to the locomotive circuits to reduce the power



Sliding wheels due to broken traction motor armature band wire on No. 3 motor of trailing unit of test locomotive. Note that the axle-driven wheel controller indicated entire time wheel was locked, whereas regular wheel slip light gave no indication. (Train No. 1/26, Division—Erie, direction—eastbound, leading unit)

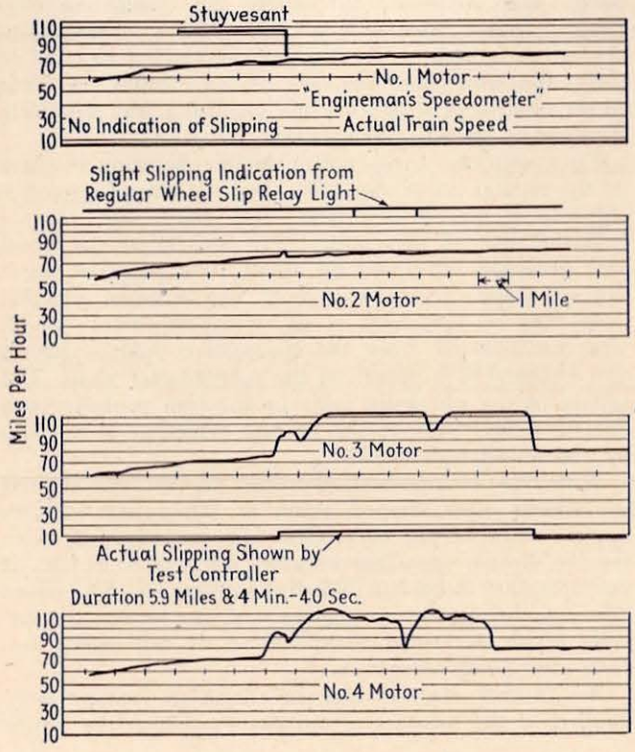


Example of slippage correction after change in locomotive circuit to reduce power momentarily at reapplication. Note that tendency for slippage to recur as power is reapplied has been eliminated. (Train No. 11, Division—Illinois-St. Louis-West, direction—westbound, leading unit)

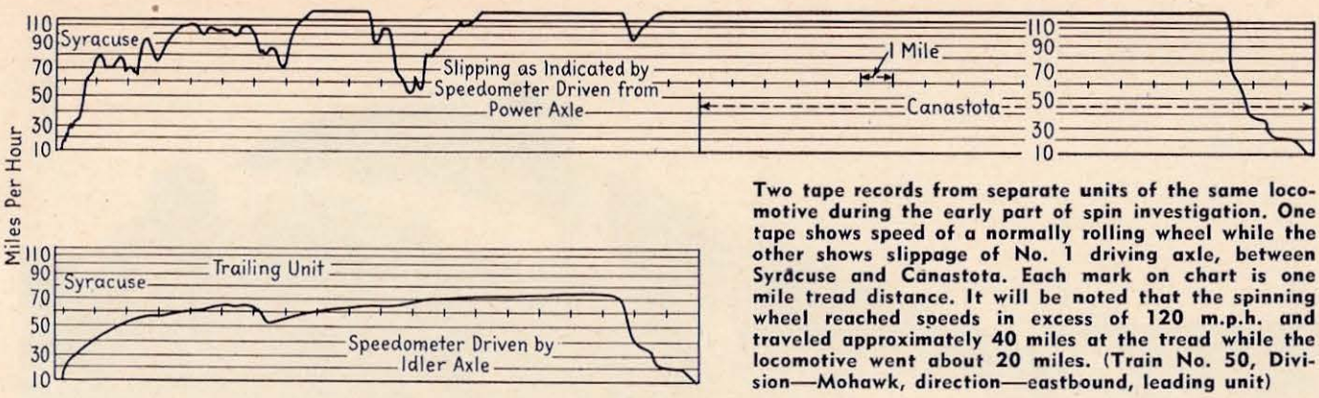
momentarily after a spin correction. This eliminated the tendency for recurrence of wheel slippage, and still permitted prompt reapplication of power. To date, this combination of axle-driven wheel-slip detection and locomotive control circuit has given the best performance of any tried.

Summarizing the results of our wheel spin investigation, a few statements can be made:

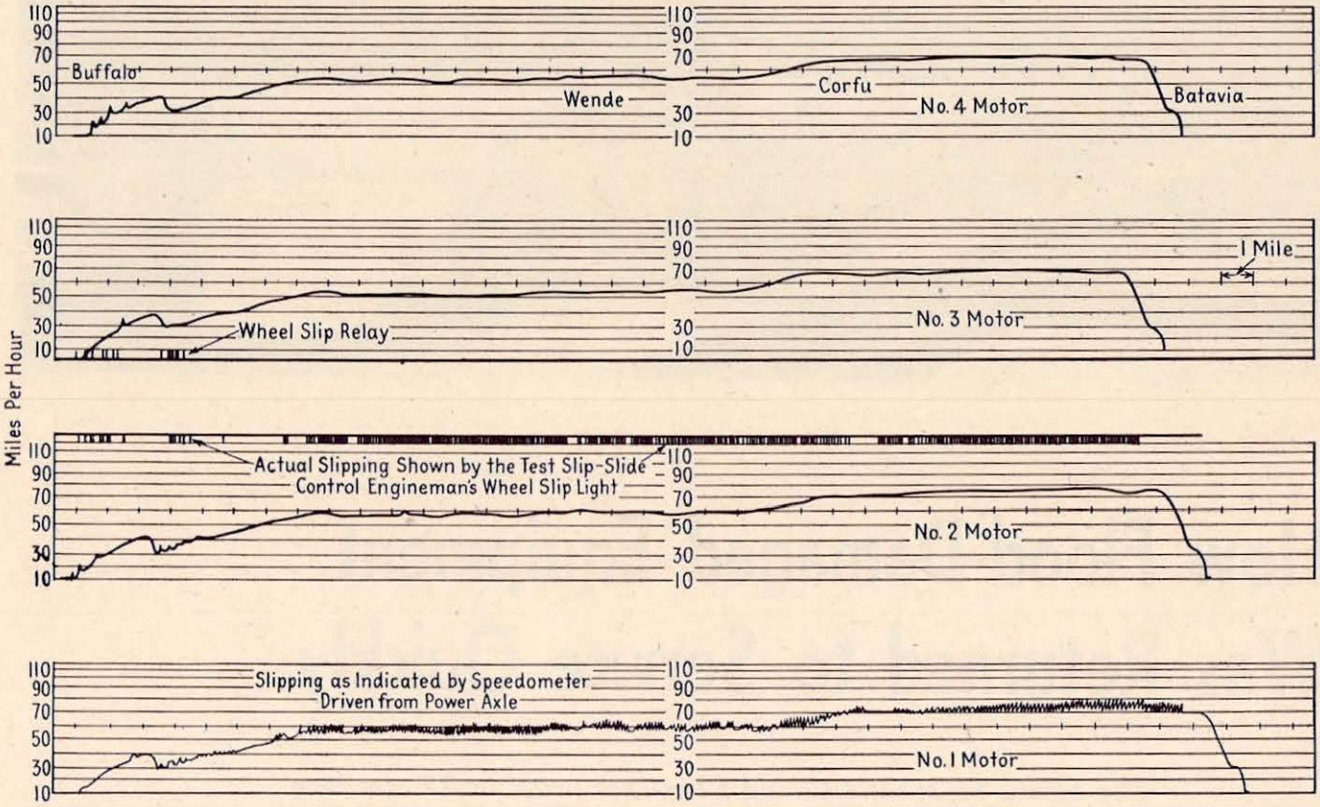
1. The existing wheel-slip relay does not afford complete protection against locomotive spin.
2. Speeds obtained during slippage often exceed by as much as 50 per cent the limit recommended from the standpoint of stress on equipment.
3. Spinning of diesel wheels occurs on trailing units as frequently as on lead units, if not more often.
4. The engineman is often unaware of spin, due to absence of slip light indication.
5. Wheel slippage occurred on all parts of the railroad. Weather influence on rail conditions is the controlling factor.
6. Axle-driven wheel protection has proved the most effective method to date for controlling wheel slippage.



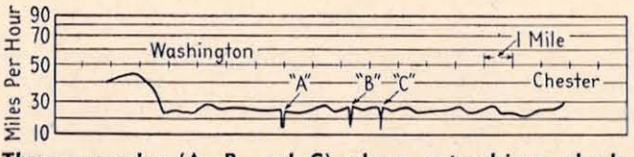
Tapes showing typical indication of slip by the axle-driven wheel control device which was not yet connected to the locomotive circuit. It will be noted that the entire duration of the slip was recorded. Only slight indication of condition was obtained from wheel slip relay. (Train No. 21, Division—Hudson, direction—westbound, leading unit)



Two tape records from separate units of the same locomotive during the early part of spin investigation. One tape shows speed of a normally rolling wheel while the other shows slippage of No. 1 driving axle, between Syracuse and Canastota. Each mark on chart is one mile tread distance. It will be noted that the spinning wheel reached speeds in excess of 120 m.p.h. and traveled approximately 40 miles at the tread while the locomotive went about 20 miles. (Train No. 50, Division—Mohawk, direction—eastbound, leading unit)



Example of excessive slippage corrected by the axle-driven wheel controller actuating locomotive wheel slip circuit in place of the regular wheel slip relays, but with circuits otherwise the same. This illustrates the tendency for slippage to recur under certain conditions as power is reapplied. (Train No. 52, Division—Syracuse, direction—eastbound, trailing unit)



Three examples (A, B, and C) where motor-driven wheels slipped toward a locked condition due to excessive dynamic braking on a freight locomotive. Speedometer on a power-driven axle. (Train No. BA-2, Division—Albany, direction—eastbound, leading unit)

7. Since the locomotive slip-control circuits have been actuated from the axle-driven wheel-control device, we have not experienced ground relay action due to spinning of wheels in approximately 104,000 miles. Prior to that period frequent ground relay action occurred.

8. It is believed that considerable saving in damage to locomotive equipment can be realized by providing the engineman with reliable indication of wheel behavior under all conditions.

"Over the past 50 years, women have been steadily, although somewhat inconspicuously, carving out noteworthy careers in the business world, and during that span of time, women workers have proved to be a great revitalizing force to American industry. Business women today are quietly helping to spark the nation's business and they're holding down their jobs with the effectiveness and quality of performance that industry has come to expect of them."
—*R. J. Morfa, chairman of the board of the Missouri-Kansas-Texas, before the Women's Traffic Club of Houston, Tex.*

How Flood-Damaged Equipment Was Returned to Service Quickly

The Santa Fe reconditioned 51 diesel units in 17 working days and restored car service promptly in spite of obstacles which at times seemed almost insurmountable

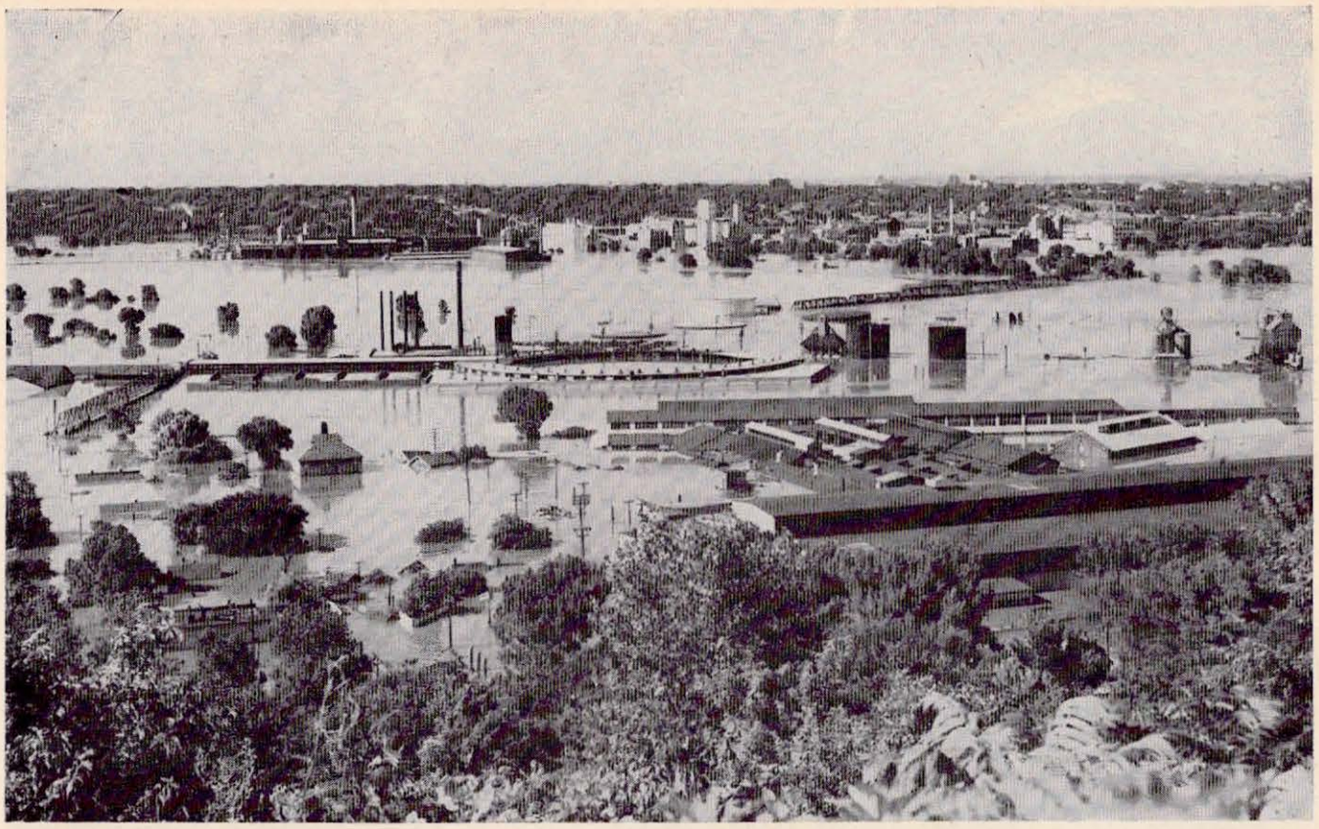
With approximately 5,500 freight cars, 21 steam locomotives and 51 diesel locomotive units involved in the July flood at Kansas City (Argentine), Kan., the Atchison, Topeka & Santa Fe made remarkable progress in restoring this equipment to service under conditions of the greatest difficulty. In fact, the major part of this work was done in little over a month and the diesel units were reconditioned in Santa Fe system shops in 17 working days.

A flood similar to that of July 13, 1951, was experienced on the Santa Fe in 1903 when the Kansas or Kaw river overflowed its banks and discharged an estimated 262,000 cu. ft. of water per second downstream, as compared with 500,000 cu. ft. in the latest catastrophe. The maximum depth of water last July was about 22 ft. in the Argentine enginehouse and 26 ft. on the car repair tracks.

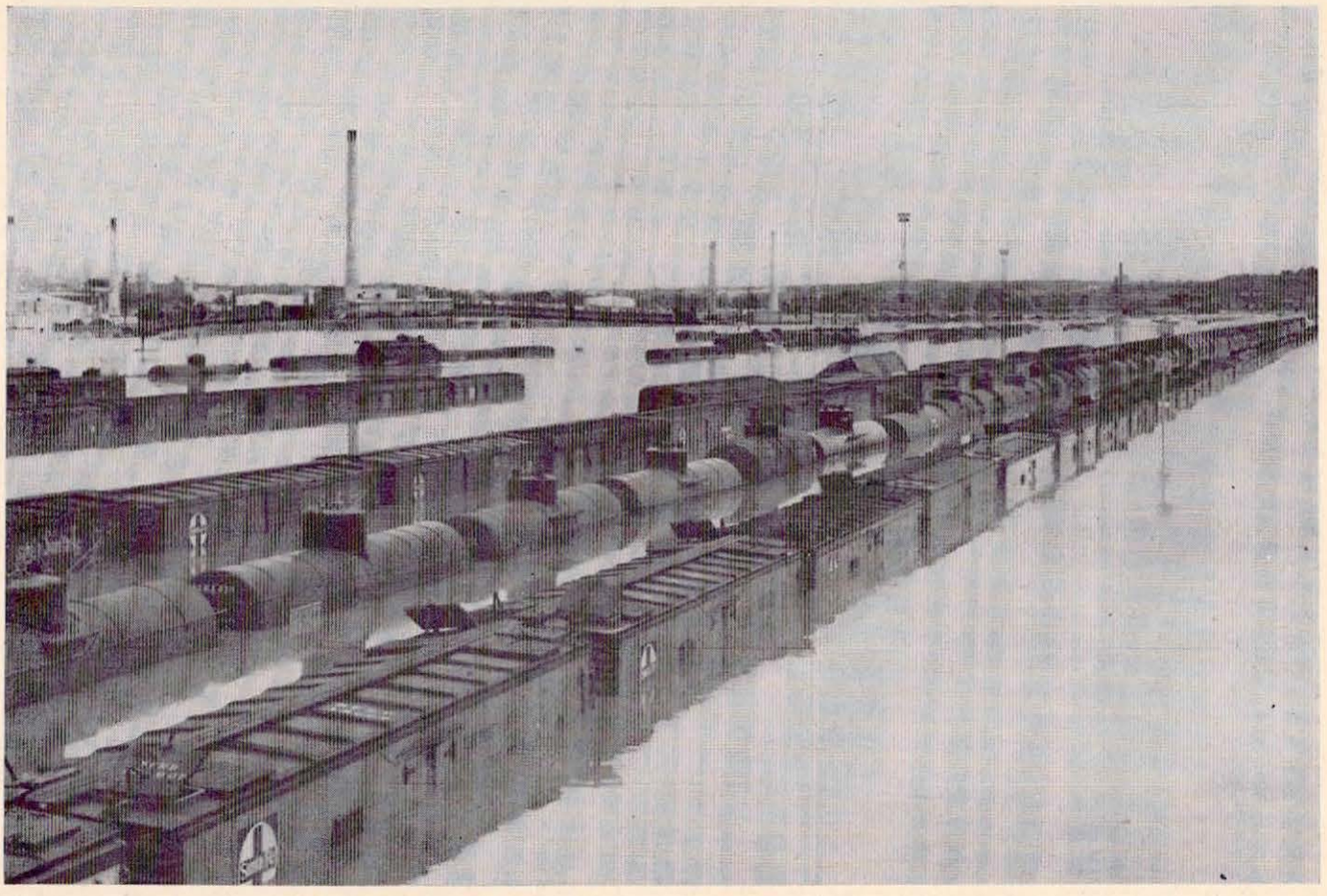
The railroad was advised that protective dikes would hold and therefore cars and locomotives were not moved out of that vicinity, although as many locomotives as possible and some wrecker equipment were placed on the hump—just in case. When the flood reached its peak, only about 700 ft. of the crest of the hump remained clear of water.

Another precaution taken by the Santa Fe was to remove electric motors from shop machines at Argentine and place them on top of steam locomotive tenders for

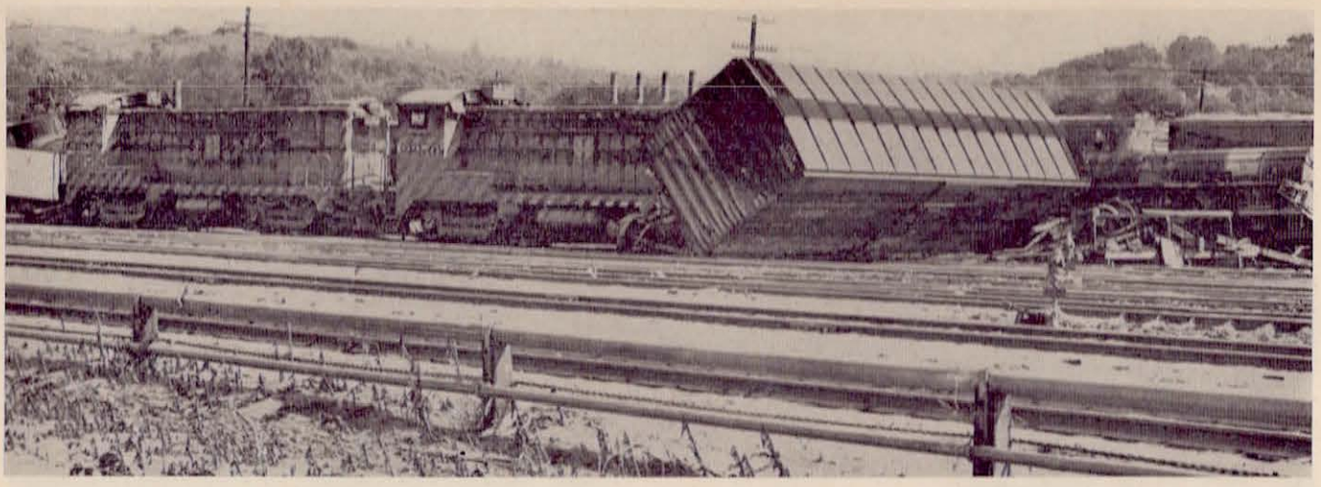
This article is based on information supplied by John Morris, general manager, mechanical, Atchison, Topeka & Santa Fe, in addressing the annual meeting of the Locomotive Maintenance Officers' Association at Chicago on September 19. Facts about the drying out of electrical equipment were presented by L. L. Luthey, general supervisor of diesel engines, at the same meeting.



The situation at the Argentine roundhouse on the afternoon of July 14



The tank cars in the foreground are not yet derailed. Several diesel locomotives may be seen on the hump in the left background



These diesel locomotives were completely submerged

Tank car bodies which floated off their trucks

protection, with the thought that water would not get that high and the motors would be safe. But when the water reached maximum depth in the enginehouse it covered the locomotive tenders and these motors were rendered inoperative. At one point, five or six steam locomotives were placed on a Santa Fe bridge to help hold it down, a procedure which worked well in the 1903 flood, but in this instance one of the bridge spans failed and three of the locomotives were lost.

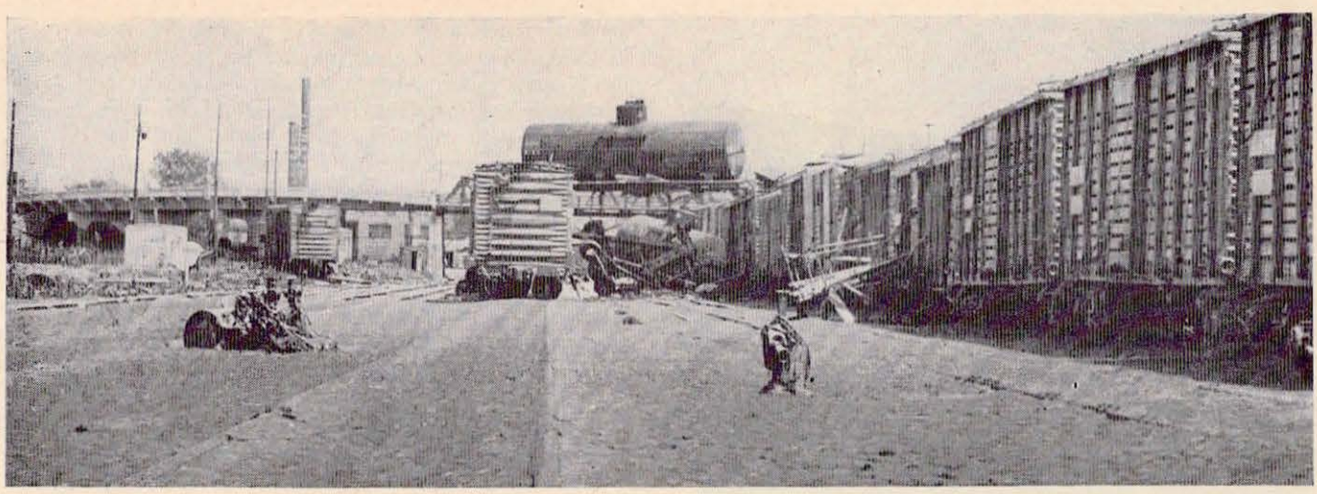
In addition to the affected motive power, 5,500 empty and loaded freight cars were wholly or partially submerged for six days. About 650 of these were derailed; many empty car bodies floated away and some came to rest on top of other equipment. The attendant wrecking and reconditioning job is neither easily imagined nor described.

Rehabilitation Program

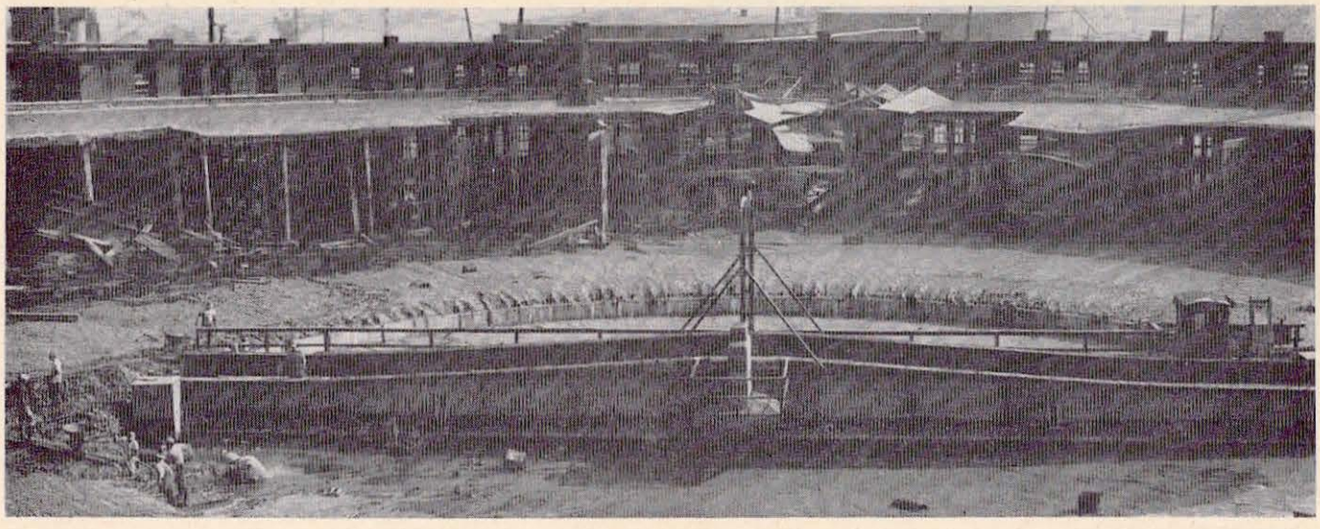
How debris and silt up to four feet deep were removed from Santa Fe facilities at Argentine after the water receded is a story in itself. This task occupied the full efforts of about 700 men, fully supplied with bulldozers, high-lifts, trucks and other mechanical equipment and working around the clock for nearly three weeks. No authentic estimate is available of how many thousand truck loads of mud were hauled away.

About the first requirement was to get compressed air and water for cleaning and testing purposes. In the emergency, electric power was supplied from an outside source to operate portable motor-driven equipment and lights. Gas-engine-driven water pumps were utilized and the railroad power plant was put in shape to afford fire protection in about three days after the cleaning operations started.

One bad condition which delayed operations considerably was the fact that several low spots in the enginehouse and car shop area could not drain properly and held not only water but fuel oil and the vapors of high-test gasoline escaping from ruptured tanks in the vicinity. This condition constituted a veritable tinder box, to such an extent that it was unsafe to use any open lights or operate either engine-driven equipment or electric motors nearby.



The receding water left this tank-car on top of two strings of box cars. Silt covers rails in parts of the yard



The Argentine roundhouse and turntable after the water had receded. Mud is four feet deep at the back ends of the stalls

In the organized rehabilitation program which was adopted, the initial objective was to get cars moving so as to allow space for switching and the re-establishment of service. In clearing yard tracks, the Santa Fe used all types of wrecking equipment, working some 14 wrecking crews on a 24-hour basis, and sometimes rerailing as many as 65 cars in a 24-hour period. These were cars simply off the rails, but some were wedged in the debris and the bodies of others had floated away. It was a herculean task to move these bodies and trucks to a point where they could be reassembled and placed back on the rails.

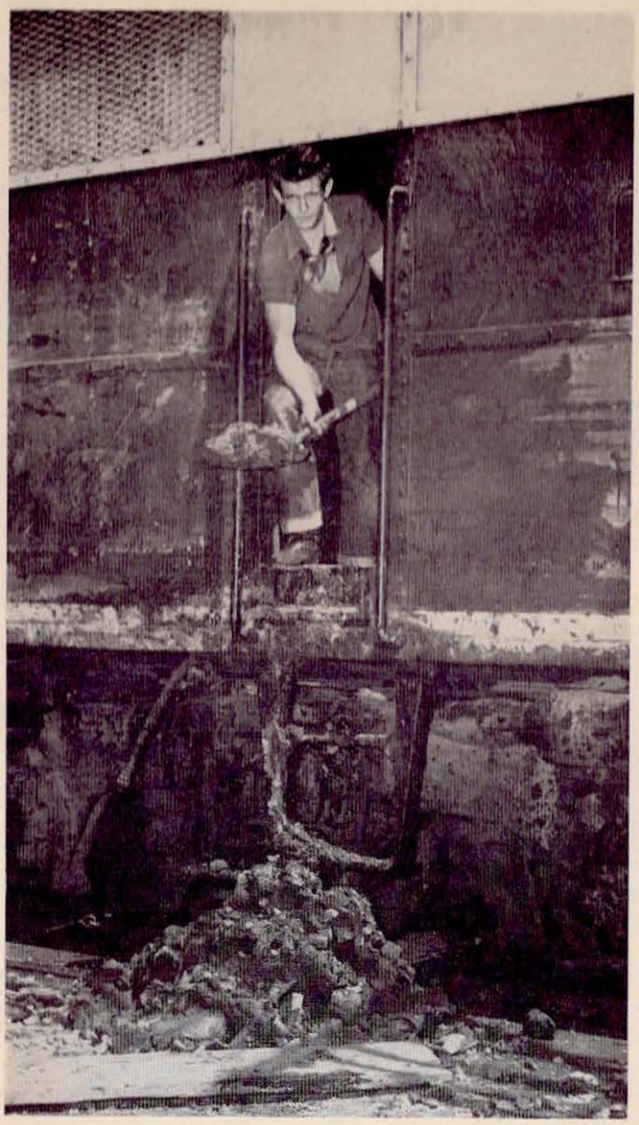
Damage from Mud

In order to recondition journal boxes and air-brake equipment, cars were removed from the adjacent yard to repair tracks and, of course, in this movement with only mud for lubrication, bearings squealed and generally were damaged. In reconditioning the bearings, mud and debris were removed from the boxes, brasses and wedges taken out, journals cleaned and inspected, hollow axles flushed out, cleaned or new brasses and wedges applied as required, boxes repacked with new waste and oil and retainer springs applied to all boxes, whether foreign or system cars. The Santa Fe undertook this additional expense on foreign-line equipment in order to prevent insofar as possible the development of any hot boxes in moving the cars to destination. Foreign lines were not billed for repacking, nor were cars stenciled after the journal boxes had been repacked.

Boxes Repacked on 350 Cars a Day

In packing boxes, car department forces used hydraulic journal jacks and worked full crews of men around the clock, repacking boxes on about 350 cars a day. The railroad gives full credit not only to personnel but to labor-saving devices and tools, including these hydraulic jacks, which are said to have paid for themselves many times over in the emergency.

Car bodies which floated away from the trucks were seriously damaged, particularly the running boards of tank cars, safety appliances, etc., and repairs could not



Misplaced Kansas soil

be made at Argentine yard on account of flood conditions. These cars were reassembled and moved to shops at Topeka, Kan., about 60 miles, in bad-order trains for necessary repairs.

Box cars and refrigerator cars which had from two to three feet of mud in them were moved to Wellington, Kan., and West Wichita, Kan., for cleaning and reconditioning.

Flood-Damaged Motive Power

Air brakes were given close attention, AB valves being removed and replaced with serviceable equipment to the fullest extent practicable. On some cars, the emergency and service portions were removed and cleaned thoroughly. Water drained from air brake equipment and piping varied in amount from one to ten gallons. The Santa Fe did not bill foreign lines for cleaning air brakes, but performed this work on all cars regardless of ownership, doing the best job possible under very demoralizing conditions.

In reconditioning motive power, both steam and diesel, the Santa Fe reports that old steam locomotives did not need as much attention as the diesels. On steam locomotives, about the biggest job was to remove the cylinder heads and valves and thoroughly wash out the valve chambers and cylinders. It was found by close inspection that both roller bearings and plain bearings on steam power were relatively undamaged, but a large number of roller bearings in stock were covered with water and badly pitted.

The damage to diesel motive power at Argentine has been described as devastating. The 51 units involved were sent to various shops on the system in order to recondition them as quickly as possible. The distribution was as follows: 18 units to San Bernardino, Cal.; 15 to Cleburne, Tex.; 13 to Topeka, Kan.; three to Fort Madison, Iowa; two units reconditioned at Argentine. Shop forces were put on three shifts so that repairs could be made around the clock.

This vast amount of work included: removing engines from the chassis of switchers; removing engines from the power plants of road-type power; dismantling all engines, cleaning them out thoroughly and putting in new pistons and rings or bearings, depending on what was required; removing main generators and traction motors for drying out, including high-voltage wires in the power plants. Fortunately only about ten traction motors failed to pass the required tests after being cleaned and dried out. Only one main generator out of the entire lot could not be returned to service after drying.

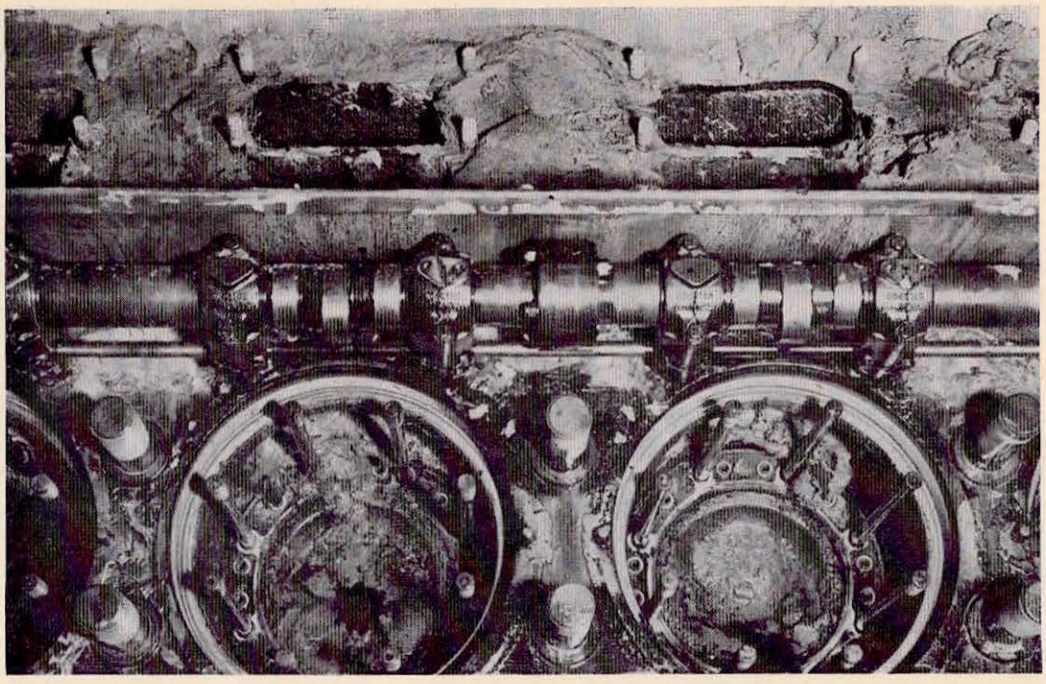
Diesel Units Made Ready to Move

The first difficulty encountered was preparing the diesel units for movement to distant repair shops, it being necessary to wash and repack suspension and axle-journal bearings, lubricate armature bearings and force out as much water as possible. Mud and silt which filled the gear-case boxes had forced out the crater compound. Debris was packed inside the traction motors, to such an extent that fire hoses were used for several hours on each unit washing out the motors to permit rotation of armatures without further damage. In some cases it was necessary to shovel away mud so that workmen could get to the traction motor inspection covers.

Some difficulty was experienced with the movement of these locomotives, especially switchers with plain journals, as a result of pitting. Excessive damage occurred to the control equipment, wire shunts, coils, terminals, voltage regulators, load regulators, control panels, contactors, etc. The majority of this equipment had to be completely dismantled, cleaned, baked and reassembled. In addition to this overhauling and efforts to reclaim this material, it was necessary to renew a large percentage of operating coils, voltmeters and ammeters, push-button switches, fuse clips, relays, resistors and contacts. Although these appliances appeared to be dried and checked satisfactorily, after the work was completed, many developed open circuits several days later. This damage is believed to be a result of electrolysis and the formation of verdigris.

Washing down electrical cabinets and equipment as soon as possible and spraying with a petroleum base cleaner or oil tends to reduce corrosion. Exposed wiring painted with insulating paint experienced little damage. Exposed varnished cambric wire cable suffered severe damage in many cases. No defects were found with the neoprene-type wire cable, indicating the desirability of this type for withstanding submersion without deterioration.

Main generators, traction motors, auxiliary generators



Mud penetrated to the innermost recesses of the diesel engines and electrical generators and motors

and motors after being dismantled were thoroughly washed down before drying. Attempts were made to use a large dry kiln, also a heat-treating furnace, for drying traction motors and main generators, but each proved unsuccessful. Reasons included inability to obtain sufficient temperature in the dry kiln; lack of automatic controls on the heat-treating furnaces to maintain a constant temperature, requiring armatures to be placed in a tightly-closed pit at approximately 300 deg. F. and allowed to cool out; and inability to carry off moisture fast enough in the heating and drying operation.

Steam heaters with forced-air blowers and infrared lamps were used on main generators in place and found to be inadequate. In addition, it was not possible to clean generators properly and the pitting condition of armature bearings necessitated dismantling all generators and motors.

The armatures of four main generators were short circuited in endeavoring to use the internal drying method. One armature was damaged, two generators meggered zero after approximately three days running and were then removed from the locomotive. One generator was actually returned to service by this method.

Extensive use of infrared lamps was helpful for both frames and armatures but necessitated three to four days drying, and it was impossible in most cases even then to secure a satisfactory insulation test. This led to further experiments resulting in the adoption of gas-fired annealing furnaces, equipped with temperature-recording instruments. By operating full blower and pilot lights as needed to maintain a temperature between 275 and 300 deg. F., it was found possible to dry two main generators and eight traction motors simultaneously in 18 to 36 hours.

Care was exercised with commutators which would not readily dry out, as overheating would have caused them to rupture. On most main-generator and traction-motor commutators, it was necessary to remove one commutator V-ring bolt and siphon out water trapped within the commutator and at the same time allow steam to escape during the drying process.

After this drying-out period, armatures and commutators were cleaned by the use of corn meal and sand-blast guns with considerable success at shops not equipped for regular handling of such equipment. In regular traction-motor and armature shops, the above repairs were handled in the usual baking ovens for drying.

Air Circulation Vital in Drying

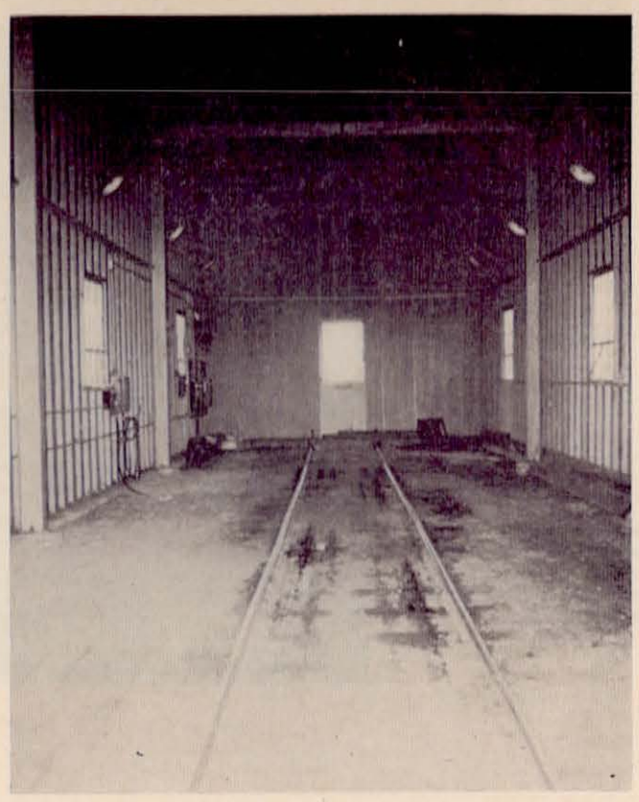
Experience showed that, regardless of the drying method used, it was imperative that ventilation be provided to give the air circulation required for removal of the moisture. Armature bearings were renewed because of pitting in practically all of the rollers and races. Frames and armatures were thoroughly washed with a water hose, as silt and mud seemed to respond only to water. Cleaning solvent tended to form a light film or paste that could not be readily removed when dry.

One diesel engine was thoroughly washed and cleaned and an attempt made to load test this unit without removing the engine or generator. This was not successful, because of mud and silt which worked through the engine parts. During the load test, excessive vibration reached a point dangerous for further operation. The engine and main generator were then dismantled and mud was found lodged inside and back of generator blowers and other engine parts, throwing this equipment out of balance. In order to obtain satisfactory engine performance it was necessary to strip and rebuild all engines.

One fact noted was that crankshafts not Turco-hardened were pitted, but all main and crankpin bearings hardened by this method were found not to be affected.

The 51 flood-damaged diesel units were moved from the ravaged area August 1 and all but two units were in operation by August 17. Approximately 50 truck loads of dirt were removed from these units during the cleaning process. All but one generator and about 10 traction motors passed the required tests after being cleaned and dried and were returned to service.

This prefabricated metal building at Alma, Mich., is typical of the single-stall diesel shelters at ends of branch lines and at intermediate points on the Pere Marquette District of the Chesapeake & Ohio



Some of the shelters are insulated and heated by two oil-burning heaters while others, like this one at Greenville, Mich., are not insulated and have extension cords serving electric heaters on the diesels

Economical Buildings to Shelter Diesels

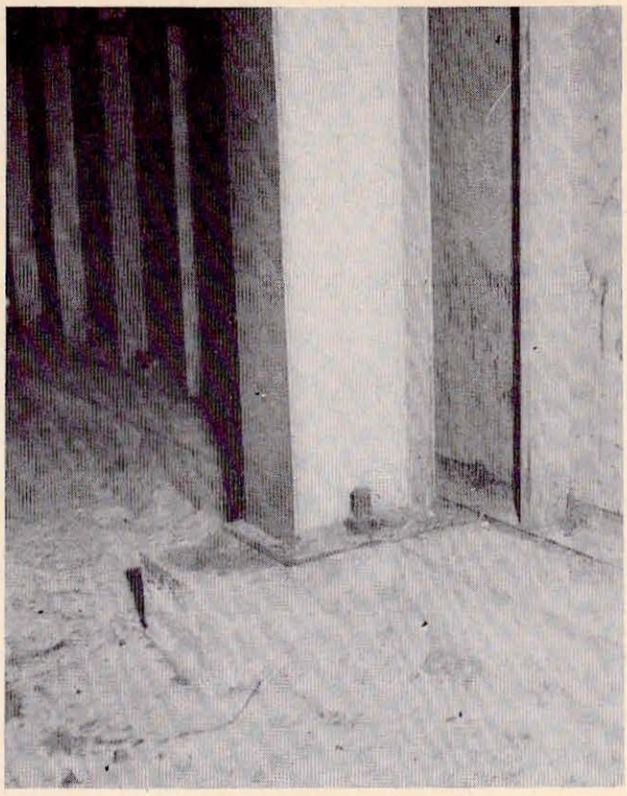
Prefabricated structures of simple design and construction prevent new Chesapeake & Ohio power from freezing up at outlying points

The Chesapeake & Ohio, Pere Marquette District, found that the acquisition of an increasing number of diesel locomotive units presented several new requirements in care and operation. This road favors the road-switcher diesel unit so equipment can be used both for hauling trains and in switching cars. The basic operating plan is to have the diesel units work on scheduled runs over the entire railroad on a rotation basis, whereby the units also work on switching assignments and eventually return to the system diesel shop at Grand Rapids, Mich., for necessary maintenance and repair work. Hence, maximum utilization of the units is effected.

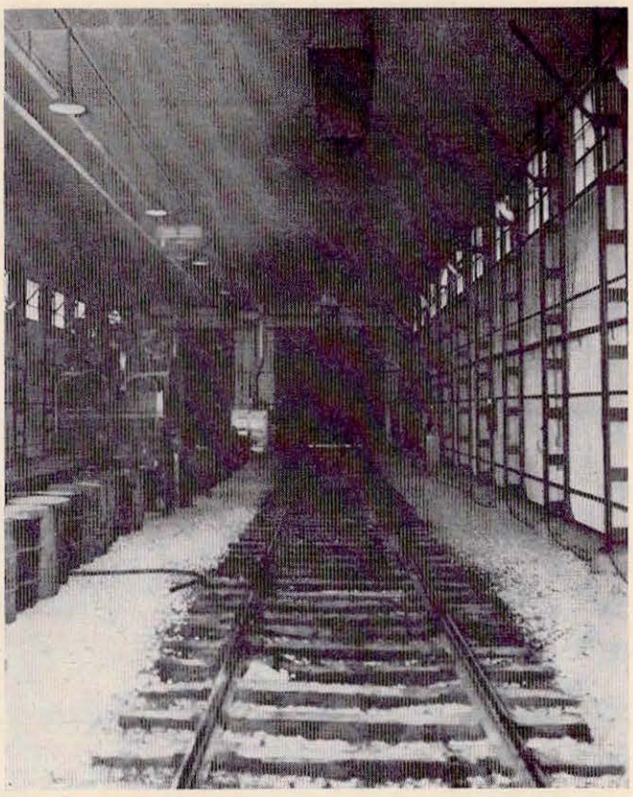
One of the problems arising from this plan was that of keeping the diesel units from freezing in cold weather when tied up overnight at various points on the line. The steam locomotives replaced by the diesels could be kept outdoors overnight on a siding and a fire maintained to prevent them from freezing. Consequently, there were no existing locomotive housing facilities at many of these outlying points. When the diesels were placed in operation it became necessary to provide shelters at such points so that, during freezing weather, the units could be parked indoors overnight or when not in service without requiring constant attendance.

The shelters erected are, for the most part, single-stall structures, each designed to accommodate one diesel locomotive unit. The all-metal buildings are covered with either Steelox panels or galvanized, corrugated sheeting. In either case the building has a structural-steel frame set on concrete foundations and footings. The buildings are simple in design and in general are each 20 ft. wide, 60 ft. long, and 16 ft. high at the eaves. A hip-type roof, of the same construction as the walls of the structure, brings the overall height to 20 ft.

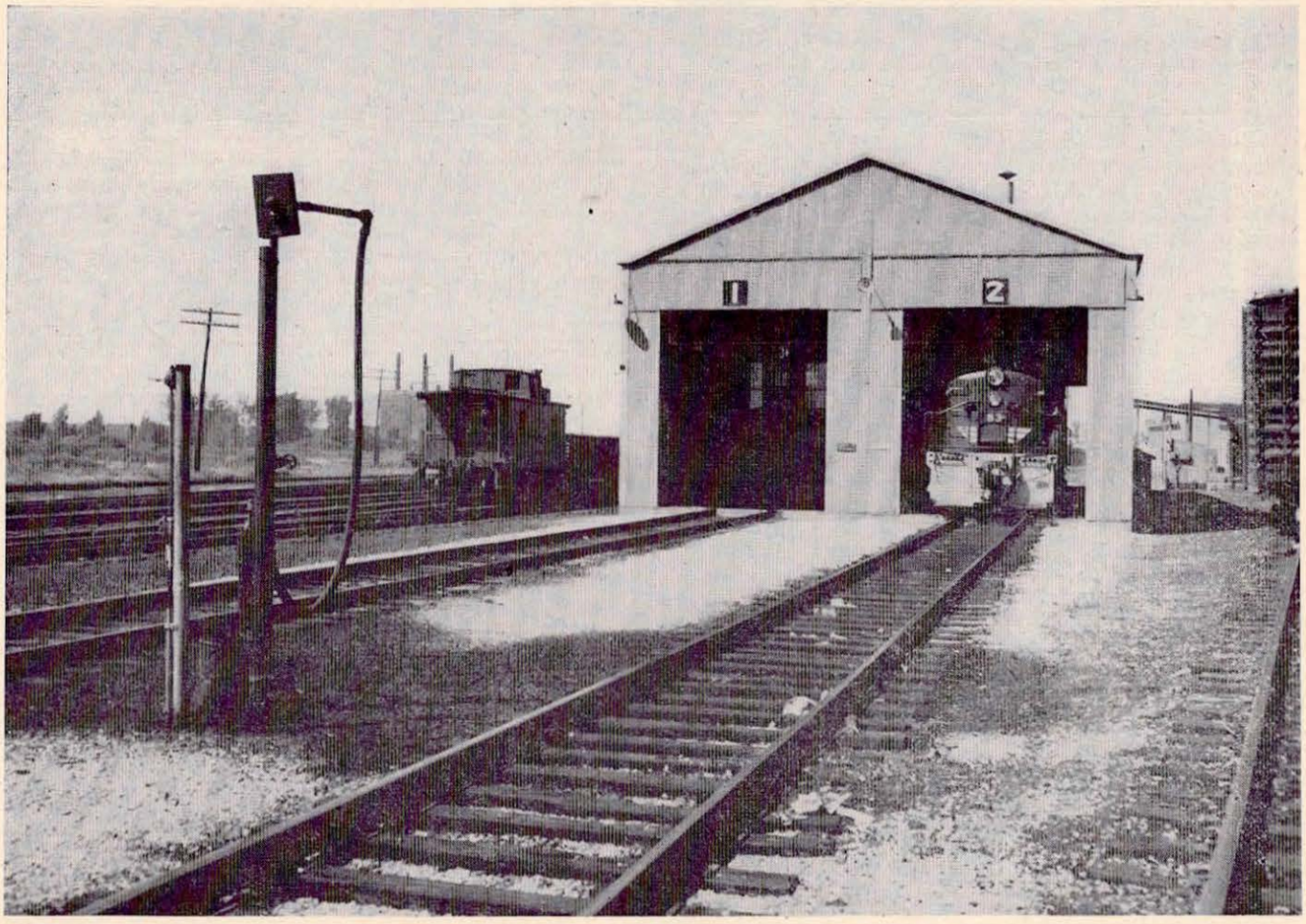
Artificial illumination consists of four incandescent lights of high wattage at top-of-locomotive height on each side and four additional lights suspended overhead. Each shelter has five metal-frame windows of standard



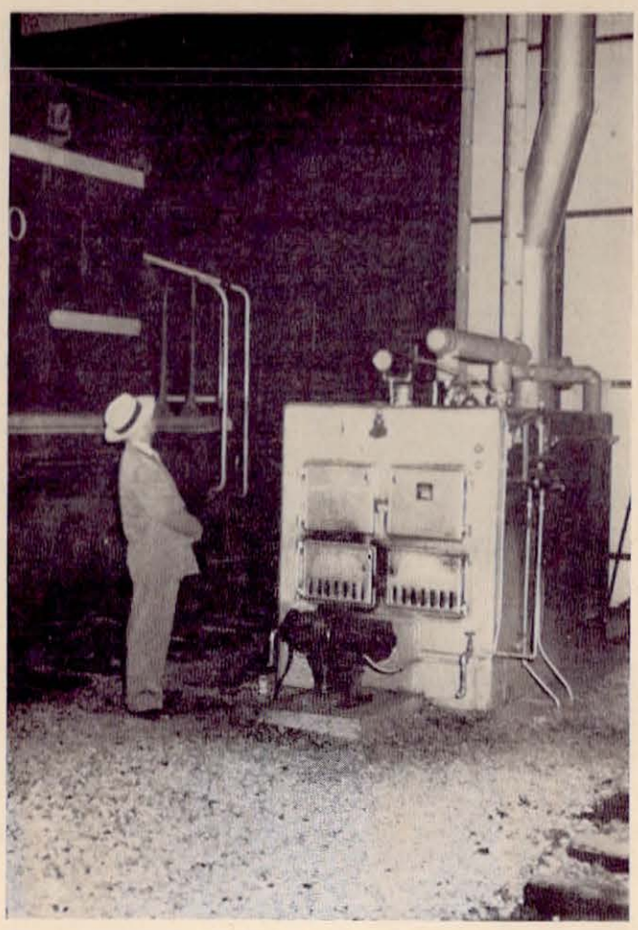
Simple in design, the buildings have structural-steel frames setting on concrete foundations and footings



The larger buildings are insulated with asbestos lining and have individual heating plants



Where more than one locomotive unit must be sheltered at a time, buildings with two through-track stalls, each capable of accommodating two diesel units, have been erected



This oil-fired sectional boiler is in one of the two-stall shelters. Steam is delivered to overhead blast heaters

dimensions, two on each side and one at the end opposite the entrance. The door opening for locomotives is fitted with a sectional-type overhead door, 16 ft. wide by 14 ft. high, which is operated by a motor having a push-button control. An all-metal door of standard size provides access to the building for employees.

Some of the buildings are heated by two Duo-Therm oil-burning heaters, the walls and ceilings being lined with asbestos insulation. Other buildings are not heated or insulated but electric power extension cords and connections have been provided to permit operation of the electric heaters on the diesel locomotives. The floors in the shelter buildings are unpaved, although in some instances they have a covering of crushed limestone. Usually the buildings are at the ends of existing spur tracks.

In a few instances, as at Muskegon, Mich., and Traverse City, double-stall buildings, each housing four units, were erected. At these points adjustments and minor repairs to the power units are made by mechanics, and to facilitate this work one of the tracks is equipped with an inspection pit about 16 ft. long. The shelters at these points are also equipped with a work bench with vise, a portable welding outfit, and an electric drinking fountain.

These buildings are of the same general construction as their smaller counterparts, but have more windows, better artificial illumination, and have electrically operated overhead sectional doors at each end for both tracks. The interior walls and ceilings of these larger buildings are lined with asbestos, and each of them is equipped with an American Redflash oil-fired sectional steam boiler which furnishes steam at 15 p.s.i. to three overhead Modine blast heaters.

At one end of both tracks, overhead exhaust hoods have been installed to enable the engines to be checked while running. Barrels of sand are provided in these buildings so the sand boxes of the diesel units can be filled by hand. For fueling the locomotives there is an oil crane outside and at some distance from each of these larger shelter buildings. Cooling water in each building is obtained from a connection to the city supply. The water is delivered through a 60-ft. service hose.

The construction of the buildings is such that they will not in themselves support a fire. But each building has been provided with several fire extinguishers, one type being the General Sno-Fog. This unit is said to produce an abundance of "snow" for blanketing a fire that may occur either in the house or on the locomotive.

The foundations for the shelters were constructed by railroad forces. The buildings of the Steelox panel type were erected by Armco Drainage & Metal Products, Inc., while those of corrugated sheet metal were erected by the Parkersburg Rig & Reel Co.

Letter from a Reader . . .

Better Protection for Journal-Box Contents

CHICAGO

TO THE EDITOR:

Being a strong advocate of reducing the period of repacking to twelve months, I must take serious exception to the arguments advanced for longer repack periods in the editorial in your August 27 issue entitled "Can Journal Boxes Be Repacked Too Often."

Evidently the matter was not given serious consideration. One who is familiar with present-day journal-box conditions, particularly on older equipment, must appreciate that waste cannot possibly be a good lubricating agent after twelve months of service. There are many journal boxes in service that are in a badly worn condition. I refer particularly to the contact surface of the lug along with the hinge pinhole. This is a matter of journal-box maintenance that has been given but little consideration, and results in a loose cover—one that bounces constantly, thereby permitting the entry of foreign matter and destroying lubrication. It is one reason why journal-box covers by the thousands are being lost off cars and strewn along the right-of-way.

There are two ways of correcting this condition: first, installing wear plates on both the contact surface and in the hinge pinhole of the lug at the time the cars are built; second, seeing that particular attention is paid to this feature when truck sides and journal boxes are in for reclamation. The use of these wear plates is an A.A.R. Recommended Practice but is followed by very few. Incidentally, if the lug is so badly worn that reclamation is not worth while, a new lug can readily be applied on a steel journal box.

All of us are talking about the grade of waste, oil viscosities, and what have you that should be used in order to reduce hot boxes, but very little, if any, consideration is being given to protecting the precious commodity that is in the journal box. More attention in this direction would have an influence in improving the operation and giving the journal-box cover a chance to do the job intended.

G. R. ANDERSEN,
Assistant chief mechanical officer,
Chicago & North Western

Elected for the coming year (seated, left to right): R. S. James, sup't. of safety and fire prevention, Denver & Rio Grande Western—secretary and newsletter editor; L. E. Hoffman, sup't. of rules and safety, St. Louis Southwestern—general chairman; R. C. Sabens, sup't. of safety, New York, Chicago & St. Louis—vice-chairman. Standing behind the newly elected officers are Robert Scott, director of safety and insurance, Atlantic Coast Line, who conducted the installation of new officers, and J. R. Thexton, sup't. of safety, D. L. & W., the retiring chairman. Unavoidably absent from the picture was the section's staff representative on the council, L. W. Dutton

A Railway Age Convention Report

"Safety Must Be Personalized"

"It must come through immediate supervisors," speakers tell Railroad Section at Safety Congress

There is no question that the mass approach to safety through motion pictures, mass rallys, etc., has been useful, or that it will continue to be so. But this approach is no substitute for a strong chain of personalized safety-consciousness which links the railroad worker with top management through immediate supervisors and departmental officers.

That, in brief, was the unanimous message of the principal railroad officers who spoke at the 39th annual meeting of the National Safety Council's Railroad Section in Chicago on October 9, 10 and 11. Most of the speakers agreed that it was beyond the capacity of a railroad safety officer to deal directly with employees except through the mass approach. The primary duty of the safety officer they said, should be to see that all links in the railroad chain of command maintain a free, two-way flow of safety-mindedness.

The section's meeting was but a part of the five-day National Safety Congress and Exposition which is sponsored each year by the National Safety Council. Numerous safety meetings and exhibits of the safety device manufacturers filled the convention facilities of five major hotels in and near Chicago's "Loop" district. The daily registration for the Railroad Section's meetings averaged slightly above 300, but at *Railway Age* press time the extent of railroad attendance and the number of roads represented by those present had not been fully tabulated.

William White, president of the Delaware, Lackawanna & Western, marveled at how little effective safety work was done back in the days when he was a division officer. "Twenty-five years ago," he told the safety officers, "no superior officer ever talked to me about safety, nor did they ever stress management's responsibility for it. Today it is management's number one job." Mr. White urged the safety men to get away from the emphasis on "unsafe conditions" and on mass educational techniques. They are easier than trying to reach the individual through his immediate supervisor, he said, but they are proportionately less effective. He declared that there is no substitute for constant supervision by trained foremen who can use praise and criticism on each employee to promote individual morale as well as the most efficient —and hence safest—performance of his gang. "The foreman must be considered as the first echelon of management. If he is not, then we are headed for trouble," he said. "Top management must insist on safety and see to it that a responsibility for safe operation is carried down through the entire organization."

"Such Action Is Not Needed"

Mr. White warned that despite today's good safety performance by American railroads, labor groups and the Interstate Commerce Commission seek jurisdiction for the commission over operating rules. "It is so easy for the proponents of this scheme to point to a few horrors of safety failure and we face a tremendous task of convincing Congress that such action is not needed," he said. "I think the Signal Inspection Act of 1937 was a serious mistake because it placed more work on the already overburdened and overworked commission. Jurisdiction over operating rules would further divide the responsibility for safety between management and the

"Mass education is not enough . . . Management must insist"—William White, president, D. L. & W.

"The job can become discouraging . . . must be alert"—D. W. Brosnan, general manager, Southern

"We must maintain dissatisfaction"—Robert J. Stone, vice-president — operations, St. Louis-San Francisco

"No magic cure . . . All humans react differently"—G. J. Willingham, director of personnel, Illinois Central

commission and it would constitute a direct trespass on managerial function. It is up to you safety officers to provide a safety record which will back up opposition to such measures."

Under Mr. White's direction, the Lackawanna recently made a complete safety study, division by division, which uncovered many hitherto unnoticed hazards. He urged that all roads similarly re-examine their facilities and operations for danger spots and that they test operating personnel for the spirit—as well as the letter—of safety rules. He laid down these four major points for safe train operation:

1. Proper observance of signal indications.
2. Proper observance of speed restrictions.
3. Correct handling and observance of train orders and bulletins.
4. Proper observance of flagging rules.

"Management—Brother's Keeper"

"The tragic price of unsafety—the loss in human values—is appalling, and is the prime reason for management's promotion of a genuine and productive safety effort. Literally, we are our brother's keeper," D. W. Brosnan, general manager of the Southern at Knoxville, Tenn., told the safety officers. Because the assets of an employee are not expendable, management must guard them," he said. "That same quality which causes a workman to protect himself and others from injury through safely planned work and better housekeeping also promotes efficiency and economy—or better work at less cost. The promotion of safety therefore, is good business."

"Regardless of fine roadbed, signaling systems, locomotives and cars, the basic ingredient for train safety is still the careful man trained in the operating rules and possessed of an unswerving devotion to safety's duty," said Mr. Brosnan. "Top management must provide safety leadership; it must see that employees are educated in the application of operating rules and safe work practices; it must provide safe tools and working conditions. This leadership must take the form of insistence, passed from rank to rank through the supervisory officers to the rank and file, that there be a high pattern of safe work.

"Hard work, thought and study are the price of a good safety record and management has to be tough on itself to secure one. The job can become discouraging because we must deal with the human mind and all of its vagaries. That part of a program that appeals to one may miss another, for there are all kinds of human beings—the sincere, the lukewarm and the mediocre. Management must be alert to the abundant efforts to camouflage feather-bedding and made-work schemes under the guise of safety. But, on the other hand, it must see that all genuine hazards are corrected, for failure to do so would be to pay mere lip service to safety."

Because working conditions in America today are the safest in all history employers even more than employees must beware of complacency that can lead to a degeneration of that record, warned Robert J. Stone, vice-president-operations of the St. Louis-San Francisco. "We must not forget that there are still over two million industrial accidents annually. We must maintain the dissatisfaction which has spurred our safety efforts to the present standards."

Mr. Stone warned against the tendency to "let George do it"—i.e., the tendency to feel that someone else has already provided all the necessary safeguards for any particular task. Because such an assumption can often be the basis for a casualty, management must train every individual to take care of himself, he said. Mr. Stone echoed the words of Mr. White and Mr. Brosnan when he pointed out the shortcomings of safety education solely along group lines. "Immediate supervision must learn the needs and personal characteristics of each individual and perform a continuing safety education through constant and understanding guidance. This is the only way that bad habits can be corrected. By its very nature, it cannot be the *direct* responsibility of a railroad safety officer."

"No Magic Cure"

G. J. Willingham, director of personnel of the Illinois Central, told the safety officers that there was "no magic cure for accidents." "We can easily build a transportation system and equip it with every safety device known. There will be no accidents—that is, until a human being steps into the picture," he said. "Because all humans react differently to a given situation, it is highly important that we know everything possible about each employee. We must know his attitude toward his work, the company, his family. This calls for an immediate supervisory

force of the highest caliber trained in the handling of the human mind." Mr. Willingham pointed out that employees of high morale are the greatest asset a business can have because their collective interest and enthusiasm constitutes the "drive" of the company. He traced the cause of many accidents to a worried or cluttered mind. The mental lapses caused by domestic squabbles, money problems and the like—rather than willful carelessness—are the prime causes of accidents, he said. He urged that every road check as carefully into the mental health of each employee as it now does his physical health. This job is one that can only be undertaken by the immediate supervising officer. To do it he must be sincerely interested in safety and able to pass the sense of safety responsibility on to his men, the speaker emphasized. By sharing this sense of responsibility, the employee gains a sense of participation which is of the highest morale value.

J. R. Thexton, general chairman of the section and superintendent of safety of the Lackawanna, presided at all three meetings. In addition to the committee reports, the safety officers heard Gordon Robertson, general agent of the St. Louis-San Francisco at Memphis, Tenn., tell of his program for safe operation of mechanized freight handling equipment; Dr. Floyd Van Atta, director of industrial hygiene for the council, tell how certain hazards in the degreasing of railroad equipment may be avoided; J. A. Meacham, industrial engineer, Sherwin-Williams Company, Cleveland, Ohio, tell of color and its application to industrial buildings; and Dr. Louis Schwartz, retired medical director of the U. S. Public Health Service, tell of the causes and prevention of occupational diseases of the skin. D. E. Mumford, a past chairman of the section and present chairman of the safety section of the Association of American Railroads (he is superintendent of safety for the New York Central) explained the council's program for off-the-job safety.

A Railway Age Convention Report

Railroads Get Praise and Prodding At National Shippers Board Meeting

Group's l.c.l. committee calls "Griffin Plan" something to emulate; Gass says car shortage will not be as bad as during last quarter of 1950

Cooperation between the railroads and their customers, the shippers of freight, will solve many of the present transportation problems as it has those of the past for these two "partners in production," said William T. Faricy, president of the Association of American Railroads, speaking at the luncheon session of the 15th annual meeting of the National Association of Shippers Advisory Boards, held at the Hotel Cleveland, Cleveland, Ohio, on October 11.

Mr. Faricy thereby emphasized succinctly the theme given to the meeting by Interstate Commerce Commissioner J. K. Knudson, who preceded Mr. Faricy on the rostrum. Commissioner Knudson, who is also defense transport administrator, recognized a continued necessity for even closer shipper-carrier cooperation now—and in any emergency which may be ahead of the country—than in the past. He further stated that voluntary cooperation, it had been proved in America, can do just as well in meeting any type of emergency as can the regimentation which exists in Russia, where, instead of being "urged" to do something, the shipper is ordered to do it—with the certainty that he will be "purged" if he fails to conform.

Cooperation, it was made plain at the business sessions preceding and succeeding the luncheon, is not a one way street in which either the carrier or the customer are expected to go all the way in solving a problem while the other party sits back and does nothing. There was plenty of evidence of real cooperation between carriers and shippers, according to the chairmen of the association's standing committees. For instance, A. P. Little, chairman of the l.c.l. committee, and general traffic manager of the Dennison Manufacturing Company, Framingham, Mass., referred to evidence which leads his committee to believe the carriers are "sincerely interested in improving their l.c.l. service." He thought it only fair to state, however, that there are things that the shippers could do to help the carriers improve merchandise transportation.

Among other things, Mr. Little's committee recommended—and the board of directors of the national association approved the recommendation—that the various area boards initiate studies to determine whether or not, at some places in their areas, plans similar to the Griffin Plan, now in effect in the Naugatuck Valley area of Connecticut, could be set up. (For a description of the Griffin Plan see *Railway Age*, September 3, page 52.) The Griffin plan shows shipper cooperation at its best, Mr. Little's committee reported.

A. H. Schwietert, director of traffic of the Chicago

Frank J. Armstrong (above left), traffic manager of the United States Radiator Corporation, Detroit, Mich., concluded his term as president of the N. A. S. A. B. at this meeting. Frank H. Cross (above right), assistant director of traffic, General Mills, Inc., Minneapolis, Minn., succeeds Mr. Armstrong. A. P. Little (left), general traffic manager of Dennison Manufacturing Company, Framingham, Mass. was elected to the senior vice-presidency

Association of Commerce and Industry, and chairman of the N.A.S.A.B. National Management Committee for the prevention of loss and damage, told the members that there is plenty of working together between shippers and carriers in the prevention of loss and damage, and that, furthermore, the good results of the joint effort are easy to see. Mr. Schwietert backed up his statement by quoting figures to show the relatively favorable claim picture of last year and in the first six months of 1951. The National Management Committee chairman praised several of the boards for their ingenuity in getting large mixed carrier-shipper audiences to attend claim prevention meetings, and gave the carriers a pat on the back for continuing to hold "careful switching" meetings with car handlers in attendance.

A. H. Gass, chairman of the Car Service Division of the A.A.R., emphasized the way cooperation shows up in the work of the car efficiency committees which the various boards have set up in their respective areas. Mr. Gass thanked the members of these committees for their work, which, he said, is helping the railroads toward new peaks of efficiency in getting the most out of the available car supply. Partly because of this shipper help, Mr. Gass stated, he does not think the car shortage will be as severe this fall as it was last year, despite the fact that more freight will be moving.

Speaking on the subject of car shortages, Mr. Faricy was called upon by Mr. Knudson to keep the railroads' orders for freight cars rolling in. He praised the carriers for ordering cars in such numbers but said that orders should keep on piling up to at least 300,000 new cars [since the present "emergency" developed]. "We want the railroads to put in their orders for more cars, Mr. Faricy, otherwise they won't be built," is the way Mr. Knudson put it.

Mr. Knudson told his listeners that "it was a lucky day for this nation—that day back in 1923—when a group of Northwest shippers voluntarily assembled in Minneapolis and decided to do something about freight car shortages. With them met the representatives of the railways who knew first hand the widespread unhappy effects of these annual acute attacks of the car shortage disease which afflicted commerce, transportation, industry and the general public. . . . That was the way the first Shippers Advisory Board came into being, following an especially devastating shortage of cars.

"How well did the shippers cooperate? The answer is to be found first in this fact: that same year, for the first time in the memory of most men, there was no car shortage in the grain area; second, we find the answer today in the thirteen Shippers Advisory Boards, located in many parts of the land, and in this great-all-inclusive, National Association of Shippers Advisory Boards."

Mr. Knudson said that the materials pinch would be "on" next year and appealed to the shippers to intensify their efforts to get cars released promptly, and in clean condition, so they can be used immediately. Shipper cleaning of cars, said the D. T. A. head, would save many millions of car-days annually, and would go a long way in mitigating the effects of the car shortage.

What to Do About Dirty Cars

Earlier in the day, F. H. Cross, assistant director of traffic of General Mills, Inc., and a vice-president of the N.A.S.A.B., had recommended that the A.A.R. require railroad agents to report to the car efficiency committees any shippers who were turning back empties to the carriers in an unclean condition. This recommendation was being made, Mr. Cross said, because the car efficiency committees in some of the board areas were complaining that they could do little to clean up the dirty car situation if they did not know who were the violators. Mr. Gass rose to say that sometimes the agent did not get to see the dirty cars, and therefore, why didn't the fellow who received the dirty car report it to the agent? That could help a lot, Mr. Gass said, for the agent could trace the car and find the culprit.

Mr. Cross and his committee also asked other things from the railroads, which, they thought, would help improve the car supply situation. It is particularly important that car supply should be improved quickly, Mr. Cross reported, because with carloadings during the last quarter of this year rising above those of last year, his group fears the car shortage may be even greater than during the latter part of 1950. He asked the A.A.R. to initiate action which would make certain that railroad agents reported to the car efficiency committees when cars are detained more than 48 hours by shippers or consignees. He further suggested that another column be added to the detention report form to show the date of the car's arrival in the terminal. The railroads, he declared, should reduce the number of bad order cars on hand by 50 per cent.

Mr. Gass, as stated above, said that he could not agree that the freight car shortage would be worse this fall than last year. He said the shortage at present is just about half what it was last year, and that although the new car supply is disappointingly small, the decrease in the number of bad orders, plus better utilization of the available cars, were combining to ease the situation considerably. This better utilization, the C.S.D. head continued, had come about partly as a result of the work of the car efficiency committees of the shippers boards,

and also through the improved performance of the railroads in moving the cars. "Production" had been stepped up so greatly, Mr. Gass concluded, that, leaving out oil traffic, which moved long distances in solid trains during the war (but is not moving in that manner now) and therefore tended to inflate the railroads' actual performance figures, the number of ton-miles per railroad-owned car per day actually is greater now than ever before in the railroads' history.

More Griffin Plans

Mr. Little's committee on l.c.l., in recommending that shippers boards study the feasibility of setting up more "Griffin plans" said that the plan offered more immediate prospects of better l.c.l. service than anything "now on the horizon." This is especially true, Mr. Little said, since this group understood that the carriers are not in favor of the national agency for handling l.c.l. which the N.A.S.A.B., at last year's meeting, recommended for railroad consideration. The l.c.l. committee also recommended that the railroads give more thought to establishing through routes and rates with the common carrier truckers. While the committee recognized that rates are not a legitimate subject for discussion at shippers board meetings, it thought nevertheless that rates have considerable effect on the diversion of desirable l.c.l. traffic to the forwarders and truck lines, and that this helps cut the quality of railroad l.c.l. service by reducing the number of through cars that can be operated.

J. H. Aydelott, vice-president, Operations and Maintenance Department, A.A.R., speaking on l.c.l., said that railroad officers responsible for handling l.c.l. freight do not favor a national l.c.l. agency patterned after the Railway Express Agency. Mr. Aydelott said that officers of the roads handling 85 per cent of the l.c.l. traffic of the country had been queried by him as to their thoughts on the proposed agency, with their replies indicating that they do not think such an organization would improve service materially or cut the railroads' costs of providing the service. The cost might well increase, in fact, since in very few cities is there a station which could handle all the l.c.l. traffic which might be offered under this pooling plan. More overhead cars, improved train schedules, pooling arrangements, and improved railroad facilities and operating methods will produce better l.c.l. service, Mr. Aydelott continued.

Evidence of cooperation between the shippers and the railroads also was conspicuous, said Mr. Schwietert, in the results of the last Perfect Shipping Month campaign, and the relatively favorable freight loss and damage claim picture. "When the [railroad] volume of traffic is taken into account we find that the claim cost per million ton-miles of freight handled was $207.61 in 1949, $144.10 in 1950 and $134.67 for the first six months of 1951. This shows a reduction of 30.6 per cent, 1950 under 1949. . . . While actual claim payments during the first six months of 1951 have increased 5 per cent, when volume of traffic is taken into consideration there was actually an improvement in freight handling, and loss and damage per million ton-miles went down another 6.5 per cent as compared to 1950."

The factor of the value of freight handled also must be considered to obtain a true measure of freight handling efficiency, Mr. Schwietert continued. "The wholesale commodity price index of the Bureau of Labor Statistics during 1949 was 155. In 1950 this had increased to 161.5, an increase of 4.2 per cent, and for the first six months of 1951 to 182.7 per cent, an increase of 13.1 per cent. Considering both volume and value, the cost per million ton-miles during 1949 was $133.94, and in 1950 $89.23, a reduction of 33.4 per cent, and for the first six months of 1951 $73.71, a reduction of 37.5 per cent.

"At least to some extent," Mr. Schwietert went on, "the efforts of the Shippers Advisory Boards have contributed to this improvement. However, we must caution against any relaxation of our effort since the claim payments are still far too high and . . . furthermore, there is an indication, based upon the number of new claims received, that the downward trend in claim payments will not continue. New claims received during . . . the first six months of 1951 show an average increase of 11.3 per cent over the first six months of 1950."

Mr. Schwietert praised shippers, the railroads and the Railway Express Agency for increasing the number of meetings held during the Perfect Shipping Month campaign, and he also complimented the carriers for continuing to hold meetings in the interest of careful switching. He praised, too, the year-round claim prevention work of some shippers and railroads. "As indicative of railroad activity one need only read the article on page 40 of the April 2 Freight Traffic Issue of *Railway Age* by O. J. Wullstein of the Union Pacific, titled '30,000 Weapons Against Loss and Damage'. . . . Unfortunately, all carriers have not inaugurated programs of a similar nature, but they ought to do so."

Mr. Schwietert extended "sincere appreciation" to railroad employee publications, Traffic World, *Railway Age*, Distribution Age and other publications which aided in this [Perfect Shipping] campaign. "The work done by them is so important and helpful in this program that we should support them whenever we can do so."

Productive Research

Mr. Faricy, after a short review of the car shortage situation and of the railroads' efforts to remove the shortage, told his listeners something of what the railroads were doing in other than the car supply field in their efforts to cooperate with the shipping public and to provide better service. The A.A.R. president discussed at length the research programs of the railroads, which "start beneath the track, with studies in roadbed and subgrade stabilization methods, and then go into the air above us with studies in the better adaptation and use of radio, induction, microwave and radar in railroad service." Past research and the railroads' improvement programs have made the railroads so efficient, Mr. Faricy said, "that in relation to prices or the value of the commodities transported, railroad freight charges for the year 1951 stand at their lowest level since the I.C.C. began to compile such relative figures."

J. Carter Fort, vice-president and general counsel of the A.A.R., reported on the legislative picture. Mr. Fort called "salutary" the provision in the Excess Profits Tax Law of 1950 which made it possible for the railroads to set up "an alternative excess profits credit . . . equal to six per cent upon invested capital, after allowance for income taxes."

Officers for the association elected for the year 1951-52 are:

President—F. H. Cross, assistant director of traffic, General Mills, Inc., Minneapolis;

1st vice-president—A. P. Little, general traffic manager, Dennison Manufacturing Company, Framingham, Mass.;

2nd vice-president—J. N. Lind, assistant general traffic manager, National Supply Company, Pittsburgh;

National secretary—C. L. Denk, Jr., general traffic manager, Fulton Bag & Cotton Mills, Atlanta.

The next annual meeting of the association will be held October 7-9, 1952, at the Hotel Jefferson in St. Louis.

GENERAL NEWS

Senate and House Pass Pension-Act Liberalizers

Amendments to the Railroad Retirement Act which would increase annuities and pensions by 15 per cent and survivor benefits by 33 1/3 per cent have passed the House and Senate.

The Senate acted October 15 and the House the following day. Final versions of both bills were alike with respect to increased benefits. However, the House bill varied in two principal respects:

1) It did not go along with the Senate in raising the taxable base from $300 to $350 a month; and

2) It eliminated a Senate provision that men with ten years or less service be shifted to social security.

The Senate provision raising the taxable base to $350 would, according to estimates, cost the railroads and their employees an additional $25 million a year each.

Conflicting provisions of the House and Senate bills will apparently send them to a conference committee, where differences can be ironed out. Conferees for the Senate were appointed October 17, but the House had not acted as this issue went to press.

Representative Harris, Democrat of Arkansas, sponsored the version that passed the House. In accepting the Harris bill, the House rejected, among other things, the measure sponsored by Representative Crosser, Democrat of Ohio and chairman of the House Interstate and Foreign Commerce Committee.

The increase in survivor benefits, as contained in both House and Senate bills, provides that in no case would a survivor's benefits under railroad retirement be less than a survivor's benefits under social security.

There are also provisions that the spouse—of a retired railroad worker—may receive benefits equal to 50 per cent of those paid to the retired employee, up to a maximum of $40 a month.

Neither the Senate nor House version provides an increase in the tax rate. That rate is now six per cent each on employees and employers, and it automatically rises to 6¼ per cent next year.

It was agreed by proponents of the bills in both houses that the present legislation is of a "stop-gap" nature, pending further study of "controversial" issues.

A resolution calling for establishment of a joint Senate-House committee to make "a full and complete fact-finding study" of railroad retirement, including its relationship with social security, has passed both houses.

CAR SURPLUSES, SHORTAGES

Average daily freight car surpluses and shortages for the week ended October 13 were announced by the Association of American Railroads on October 18 as follows:

	Surplus	Shortage
Plain Box	13	6,185
Auto Box	21	74
Total Box	34	6,259
Gondola	0	4,330
Hopper	0	6,279
Covered Hopper	0	114
Stock	56	2,413
Flat	6	895
Refrigerator	2,523	0
Other	253	72
Total	2,872	20,362

Some General Yardmasters Vote in Representation Case

Erie general yardmasters, who perform the work of "trick yardmasters," were included by the National Mediation Board among yardmasters eligible to vote in a recent representation election. The board so ruled in the absence of a determination by the Interstate Commerce Commission that the general yardmasters involved were "officials"; but it stipulated that the ruling was "without prejudice to any subsequent determination by the commission that such personnel are officials."

The election was won by the Railroad Yardmasters of America, which thus supplanted the Brotherhood of Railroad Trainmen as collective-bargaining representative for all Erie yardmasters. The case was docketed as No. R-2439.

Forgash Becomes D.T.A. Consultant on Forwarding

Morris Forgash has joined the staff of Defense Transport Administrator James K. Knudson as consultant on freight forwarding. Mr. Forgash is president of United States Freight Company, parent of Universal Carloading & Distributing Co.

Seatrain Tries New Tack In Savannah-Line Case

Seatrain Lines has filed a new application with the Interstate Commerce Commission, seeking authority to establish Seatrain-type service between New York and Savannah, Ga.

The new application is on the basis of "public convenience and necessity." It replaces a previous application under which Seatrain sought authority to acquire New York-Savannah rights of Ocean Steamship Company. Seatrain has advised the commission it wants to withdraw the latter application.

This latest proposal by Seatrain is for permanent authority to engage in common carrier service between New York and Savannah. Pending final action on this application, Seatrain has applied for permission to begin operations immediately on a "temporary" basis.

The application filed with the I.C.C. said the carrier estimates it will have available for transportation "not less than 200,000 tons" in its first year of operation. Revenues from this volume would aggregate from $1.3 million to $1.6 million, Seatrain said.

The carrier said prospective income before taxes from this new service would range from $200,000 to $400,000 a year. It took the position that the New York-Savannah service "is and will be required by the present or future public convenience and necessity."

Meanwhile, Ocean Steamship joined with Seatrain in asking withdrawal of the earlier application which the two carriers filed last May. This application has stirred up opposition by eastern and southern railroads, except Central of Georgia and New York, Susquehanna & Western. Ocean Steamship is a subsidiary of Central of Georgia, while the Susquehanna serves Seatrain's New York port facilities. (*Railway Age*, September 17, page 93).

O.R.C. Doesn't Like Report in Pullman Case

The Order of Railway Conductors has advised President Truman that the emergency-board report in the Pullman-conductors case "makes no contribution whatsoever toward a settlement." This was revealed in a statement issued October 12 by O.R.C. President Roy O. Hughes.

The emergency board recommended that the conductors settle on the basis of a Pullman Company proposal which is on the pattern of recent settlements in railroad cases. The proposed settlement would give the conductors a wage increase of $37.95 per month (*Railway Age* of October 15, page 107).

According to Mr. Hughes' statement, the O.R.C. has now suggested to President Truman that he refer the board's report, "and the dispute with which it deals," to a "committee of impartial arbitrators for authoritative study." The union suggested further that this committee be composed of the president (David L. Cole) and previous presidents of the National Academy of Arbitrators. Mr. Cole would be asked to select former academy presidents who would serve with him on the committee.

St. Lawrence Seaway Gets Another Setback

Chairman Buckley of the House Committee on Public Works advised committee members on October 11 that no further meetings on St. Lawrence seaway legislation would be called until after January 1, 1952. On the previous day, the committee had completed

a series of hearings on the seaway and adjourned "subject to call of the chair."

The subject of the hearing was House Joint Resolution 337, which embodies the new seaway proposal sponsored by Representative Blatnik, Democrat of Minnesota. The resolution was introduced after President Truman told Prime Minister St. Laurent of Canada that he would support the building of the seaway by Canada alone—if Congress failed to approve the proposed joint undertaking. (*Railway Age* of October 8, page 34, and October 15, pages 67 and 107.)

A.A.R. Reactivates Motor Transport Division

The recently-created Committee on Motor Transportation of the Association of American Railroads held its organization meeting in Washington, D. C., October 10, and elected E. R. Feldman as its chairman. Mr. Feldman is the Association's acting director of competitive transportation research.

Formation of the new committee, which was authorized recently by the A.A.R. board of directors, amounts to reactivation of the association's former Motor Transport Division. The stated purpose of the committee is "primarily to study such subjects as the scope and trend of highway motor vehicle operation by railroads."

The committee's vice-chairman is L. B. Young, assistant to president of the Southern Pacific. It has 15 other members, representative of the several territories.

I.C.C. Discontinues Last Part of Bus-Fare Probe

The Interstate Commission has discontinued the last part of the general investigation of bus fares which it instituted in July, 1946. In a supplemental report in the proceeding (No. MC-C-550), the commission has found that fares charged by the bus lines for irregular-route and special-operation services are not unreasonable or otherwise unlawful.

The supplemental report was dated October 1, and the accompanying order discontinued the proceeding insofar as it was not discontinued by an order of December 11, 1950. The latter discontinued the regular-route phase of the investigation, the accompanying report having found that the bus fares there involved were also not unreasonable or otherwise unlawful. (*Railway Age* of January 8, page 52.)

I.C.C. Orders Express Rate Increase in Mississippi

The Interstate Commerce Commission has issued an order requiring the Railway Express Agency to increase its intrastate rates in Mississippi to a basis in line with that approved by the commission for interstate application. Issuance of the order, in the No. 30760 proceeding, followed upon a report wherein the commission found that undue discrimination against interstate commerce had resulted from the Mississippi Public Service Commission's refusal to grant R.E.A.'s application for approval of the intrastate increases.

In making this report, the I.C.C. withheld issuance of an order, but stated that one would be issued unless the Mississippi commision advised that the intrastate adjustment would be approved. "No response," the I.C.C. order said, "has been received from said Mississippi . . . commission, and . . . said commission has not permitted the Railway Express Agency . . . to publish the changes in intrastate express rates and charges determined in said report to be required to remove the unjust discrimination. . . . "

DINING CAR OFFICERS met in St. Louis on October 2-4, when they discussed personnel training, labor and wages, safety, ever-mounting food costs and many other current problems in their field. Present were 64 members of the association, representing 46 different railroads. Shown here in an informal discussion are C. E. Buckley, director, dining car and commissary department, Missouri-Kansas-Texas; G. A. Cameron, manager, dining car service, Southern Pacific (T. & N.O.), newly-elected president of the group; W. F. Ziervogel, superintendent of dining cars, Missouri Pacific Lines, who was re-elected secretary-treasurer, and A. E. Yarlott, general superintendent, dining car service, New York Central, retiring president. Absent from the picture was H. I. Norris, manager of the dining car and hotel department of the Union Pacific, who was elected vice-president of the association

BAR Passengers Approve Faster Train Schedules

The Bangor & Aroostook's experiment with faster passenger-train schedules between Bangor and Aroostock County towns is a popular one, according to responses to a printed inquiry signed by Curtis M. Hutchins, president, and distributed on trains and at stations. The faster schedules went into effect August 27, simultaneously with distribution of the inquiries, in which Mr. Hutchins pointed out that faster schedules might occasionally cause trains to be late. This, he explained, is because faster running time will not permit enginemen to make up a great deal of time when a train starts late, as is sometimes necessary to wait for connecting trains.

Under the new schedules, 35 min. were cut off the running time of the northbound "Aroostook Flyer" and 25 min. off the southbound schedule. The schedule of the southbound "Potatoland Special" was shortened by 35 min., and the northbound time was cut by 52 min. These schedules will be in effect until mid-December, when winter schedules go into effect and speed will have to be reduced. As soon as track conditions permit, the new fast schedules will be offered again.

August Employment

Railroad employment increased 0.11 per cent—from 1,294,525 to 1,295,941—from mid-July to mid-August, and the mid-August total was 2.03 per cent above that of August 1950, according to the Bureau of Transport Economcs and Statistics of the Interstate Commerce Commission.

The index of employment, based on the 1935-1939 average as 100, was 124.4 for August, compared with 124.2 for the previous month and 121.9 for August, 1950.

August employment was above that of the previous month in only two groups—executives, officials and staff assistants, up 0.08 per cent, and train and engine service, up 1.06 per cent. The decreases in the other five groups were all less than one per cent, the largest being 0.89 per cent in the group embracing yardmasters, switchtenders and hostlers.

As compared with August, 1950, employment increased in all groups

except that embracing transportation employees other than those in train, engine and yard service, which was down 0.93 per cent. The range of the increases in the other six groups was from 4.44 per cent in maintenance of way and structures to 0.68 per cent in the group embracing yardmasters, switch-tenders and hostlers.

Waybill Studies

Additional waybill studies have been issued by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. They are: Statement No. 5136, Mileage Block Distribution of Traffic and Revenue in the Products of Agriculture Group, by Commodity Class, Territorial Movement, and Type of Rate—All Terminations in 1950; Statement No. 5137, Mileage Block Distribution of Traffic and Revenue in the Animals and Products Group, by Commodity Class, Territorial Movement, and Type of Rate—All Terminations in 1950; Statement No. 5138, Mileage Block Distribution of Traffic and Revenue in the Products of Mines Group, by Commodity Class, Territorial Movement, and Type of Rate—All Terminations in 1950; Statement No. 5139, Mileage Block Distribution of Traffic and Revenue in the Products of Forests Group, by Commodity Class, Territorial Movement and Type of Rate—All Terminations in 1950; Statement No. 5143, State-to-State Distribution of Products of Agriculture, Traffic and Revenue—Terminations in the Year 1950; and Statement No. 5146, Distribution of Petroleum Products by Petroleum Administration Districts—First Quarter 1951.

ORGANIZATIONS

L. J. Dorr Becomes Assistant Secretary of N.I.T. League

Lester J. Dorr has been appointed assistant secretary of the National Industrial Traffic League. He will be in the league's Washington, D. C., office as a member of the staff of Executive Secretary Edward F. Lacey.

Mr. Lacey's announcement of the appointment included this statement: "Mr. Dorr for several years past has been executive secretary and traffic commissioner of the Corn Exchange, Buffalo, N. Y. He has had a broad experience in the field of traffic and transportation."

U. S. C. of C. Plans Third Transport Meeting

The third regional transportation conference sponsored by the Chamber of Commerce of the United States will be held December 12 and 13 at Cleveland, Ohio. "Prospective legislation growing out of the Senate Interstate and Foreign Commerce Committee investigation of government policy toward transportation will be the principal subject of discussion," the chamber's announcement said.

It also said that the Cleveland Chamber of Commerce will act as host for the meeting. The two previous conferences of the series were held in Oklahoma City, Okla., and Atlanta, Ga., covering in turn the Southwest and Southeast. The Cleveland meeting will be the midwest conference.

The **Railway Business Women's Association of Metropolitan New York** will celebrate its first birthday on October 23 with a buffet supper in room 553, 466 Lexington avenue, at 6 p.m. The Railway Express Agency is contributing a birthday cake and W. Gordon White, R.E.A. general superintendent, will be guest speaker. The association's first fall luncheon-card party will be held in the Park Sheraton Hotel, at 12:15 p.m. on November 3.

The **Northwest Shippers Advisory Board** has announced that Z. G. Hopkins, special representative, Association of Western Railways, will be the principal speaker at a joint luncheon session to be held October 25 at Grand Forks, N. D., coincident with the board's 98th regular meeting. Mr. Hopkins will speak on "Tax Influence on Transportation Costs." The luncheon will be held jointly with the **Red River Valley Traffic Club.** Both the meeting and the luncheon will be held in the Dacotah Hotel.

NEW TRAIN INDICATOR BOARDS for the Chicago & North Western's Chicago terminal are of gleaming aluminum. Unlike their predecessors, the new boards are being mounted on the concourse floor with information panels just above normal eye levels. A total of 4,800 plates are required for the names, departure time and station stops of the 169 suburban and through trains operated out of the station. Each of the 16 new indicators is 11½ feet high, 3 feet wide and 10½ inches deep. They were designed and built especially for the C.&N.W. by Job Hutchinson of Great Neck, N. Y.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

The **Chicago, Rock Island & Pacific** has ordered 200 70-ton 29-ft. 3-in. covered hopper cars from the Pullman-Standard Car Manufacturing Company at an estimated cost of $1,400,000. Delivery is expected about October 1952.

The **Great Northern** has ordered three 95-ton flat cars and 15 30-ft. steel caboose cars from its own shops. Estimated cost of the flat cars, which will be delivered in December, is $20,000. The caboose cars, to be completed October 31, will cost an estimated $131,000. Authorization to purchase the cabooses was reported in *Railway Age* of May 21, page 182.

The **New York Central** has ordered six 125-ton and four 170-ton flat cars from Despatch Shops. The smaller cars, to cost $170,010, are scheduled for delivery next March and April. The larger cars will cost $174,928 and are scheduled to be delivered next April and May.

The **New York, Susquehanna & Western** has ordered 35 50-ton "PS-1" box cars from the Pullman-Standard Car Manufacturing Company.

The **Union Tank Car Company** has ordered 400 50-ton tank cars from its Whiting, Ind., shops.

LOCOMOTIVES

The **Seaboard Air Line** has ordered 10 diesel-electric switching locomotive units from the Baldwin-Lima-Hamilton Corporation at an approximate cost of $1,182,000. Delivery is scheduled for the first quarter of 1952.

SIGNALING

The **Atlantic Coast Line** has ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company material to install remotely controlled interlockings at ends of single track across the Santee river and at the south switch of the northward passing track at Lanes, S. C., with the control point at Lanes. In addition to the style C control machine, the order includes styles H-2 high searchlight and N-2 dwarf colorlight signals, M-23B dual-control electric switch machines, relays, rectifiers, transformers, switch circuit controllers, style SL-26 electric switch locks, and housings. Field installation will be handled by railroad forces.

SUPPLY TRADE

American Seating Company Takes Over Karpen Line

Certain assets of the S. Karpen Transportation Seating division were transferred from the International Furniture Company, Chicago, to the American Seating Company, Grand Rapids, Mich., under terms of a contract announced in Chicago on October 12.

Under the agreement, American Seating will manufacture the S. Karpen line of transportation seating in its Grand Rapids plant and International will withdraw entirely from the transportation seating business. In announcing the transaction, H. M. Taliaferro, president of American, and M. J. Fischer, president of International, said their organizations are presently working on plans whereby the shift in manufacturing operations from Chicago to Grand Rapids will not interfere with service to customers. Mr. Taliaferro said American will own all patents, styles and designs that have been produced in the Karpen line and will contnue to handle all accounts formerly handled by International.

Robert M. Hoel, who has been appointed sales agent for the American Car & Foundry Co. at Chicago, reporting to J. H. Van Moss, western sales manager. Mr. Hoel has been with A.C.F.'s sales department since 1946 and will represent the company in general railroad sales throughout the midwest

Charles F. Palmer, whose retirement from the **Pittsburgh Steel Company** was announced in *Railway Age* September 17, attended Washington University, leaving to join his father as a salesman and secretary of the Frank E. Palmer Supply Company in 1907. In 1914, he joined the Pittsburgh Steel Products Company as western manager of sales, a position he retained until the company was absorbed into the Pittsburgh Steel Company in 1926. At that time he was appointed manager of railway sales, the position he held at the time of his retirement.

Charles F. Palmer

The **Pacific Coast Borax Company** has appointed the **Chapman Chemical Company,** Memphis, Tenn., as a distributor of its weed and grass-killing products "Borascu" and "Polyborchlorate 88." Distribution arrangements cover all parts of the United States except the Pacific Coast.

Archie K. Beard has been appointed midwest sales manager of **Turco Products, Inc.,** and **Harold P. Glavin** has been named general manager of the midwest division factory, with headquarters in Rockdale, Ill.

L. S. Heasom, assistant to vice-president of the **National Aluminate Corporation,** has been appointed assistant vice-president. **R. C. Bielenberg,** assistant manager railway service, has been appointed manager railway service. Both have headquarters in Chicago. After receiving a chemical engineering degree from the University of Kansas in 1923, Mr. Heasom held positions with the Missouri Pacific and the Chesapeake & Ohio before joining National Aluminate in 1928, as field service representative. In 1944, he became assistant manager railway service and in 1947 he was made assistant to vice-president.

Don C. Smith has been appointed Pittsburgh district sales manager of the **Koppers Company's** Wood Preserving division. He is succeeded as sales manager of the division's New York area by **Don F. Taylerson,** who has been a sales representative in the Pittsburgh district office.

The **Dearborn Chemical Company** has appointed **Dr. William A. James** as director of research and **Jerry Shaw** as sales representative.

Henry T. Stetson, formerly vice-president of the **Safety Car Heating & Lighting Co.,** has been elected president to succeed the late **Charles W. T. Stuart,** whose death was reported in *Railway Age* October 8, page 63. A photograph of Mr. Stetson appears on page 8.

The **Sherwin-Williams Company** has created three new transportation sales territories: Northern California, southern California and Ohio-Michigan. **W. R. Clark** has been appointed transportation sales representative for the Ohio-Michigan area, with headquarters in Cleveland. **E. S. Dean** will have charge of the northern California area, working out of Oakland, and the southern California territory will be under **T. A. Jordan,** in Los Angeles.

Howard Sommer and **Charles G. Campbell** have been appointed operating managers of, respectively, the Memphis branch and the Reading, Pa., branch of the **Graybar Electric Company.**

OBITUARY

Wayne G. Kenworthy, safety engineer and personnel manager of the Pacific Car & Foundry Co., Renton, Wash., died on October 10, while attending the National Safety Congress convention in Chicago.

CAR SERVICE

I.C.C. Service Order No. 871, which restricts the free time allowed on box cars at ports, has been modified by Amendment No. 3. The amendment adds provisions which make it clear that the order does not suspend the operation of demurrage rules giving shippers and receivers special time allowances when loading or unloading delays occur as a result of catastrophies, acts of God, etc.

CONSTRUCTION

U.P. Plans $5.6 Million Diesel Repair Shop

Work is scheduled to begin before the end of October on a new main diesel repair shop for the Union Pacific at Salt Lake City, Utah. The structure has been estimated to cost $5.6 million. It will be erected on the approximate site of an engine house now in the final stages of dismantlement.

The building will include all equipment and machinery necessary for maintenance and repair of both diesel and gas-turbine-electric locomotives. The main structure will be 410 feet by 162 feet and there will be two wings, one 220 feet by 102 feet and the other 303 feet by 80 feet. The building will have five different elevations ranging from 25 feet to 65 feet in height. It will be built of reinforced concrete, concrete blocks and glass blocks.

Basic shop equipment will include a 250-ton overhead crane capable of lifting the gas-turbine locomotives (which are heavier than present diesel units) and a 90-ton drop-pit table. There will be seven servicing tracks equipped with elevated platforms at engine floor level and depressed pits below the tracks.

Jersey Central Lines.—The westbound station building at Plainfield, N. J., will be remodeled and modernized. Additional improvements include: Resurfacing concrete pavement on track side of westbound station; refinishing tunnel between westbound and eastbound station buildings; redecorating eastbound station waiting room and installation of a lowered ceiling and more effective lighting. Remodeling work began last week and will take several months to complete.

Louisville & Nashville.—The state of Tennessee has sold to the L.&N. the 205 acres of land adjacent to the road's Radnor yard near Nashville, Tenn. Acquisition of this land by the railroad opens the way for work to begin on the new $14 million hump and retarder classification yard which will be used also by the Nashville, Chattanooga & St. Louis on a joint tenancy basis. Details of this project were described in this column on August 6, page 87.

Southern. — Contracts have been awarded, at indicated estimated costs, to: The Brice Building Company, Birmingham, Ala., for a diesel shop, a yard office and communications tower and a retarder tower building in Ernest Norris yard, Birmingham ($990,000); and for a diesel shop and storehouse at Huntingburg, Ind. ($123,490).

The following projects have been authorized at indicated probable costs: Track changes at Cleveland, Tenn. ($24,094); extension to passing track, Springville, Ala. ($22,100); construction of set-out track, Chalmette Slip, La. ($21,713); and replacing part of timber trestle with earth embankment near Shelby, N. C. ($20,900). Overall probable cost of new diesel facilities at Huntingburg will be $192,000, part of which is covered by the contract reported above.

Toledo, Peoria & Western-Illinois Terminal.—These roads have filed with the I.C.C. a joint application for authority to construct a direct connection for the interchange of traffic at East Peoria, Ill. The building of about 950 ft. of track would be involved.

FINANCIAL

Baltimore & Ohio Chicago Terminal.—*New Directors.*—Carl H. Groninger, freight traffic manager of the Baltimore & Ohio at Chicago; R. E. Coleman, B. & O. passenger traffic manager at Chicago; and C. K. Strader, superintendent of the B. & O. C. T., have been elected directors of the company. They succeed A. L. Doggett, who retired as Chicago freight traffic manager of the B. & O. on October 1; and the late Roy B. Kincaid and L. E. Thornton.

Boston & Providence.—*Reorganization.*—Division 4 of the I.C.C. has denied a petition asking that further hearings in this case be suspended until claims between this road and the New York, New Haven & Hartford can be settled. The New Haven operates the properties of the B. & P. In denying the petition Division 4 said adjudication of the claims "may not be essential to the formulation of a plan of reorganization" for the B. & P. It then noted that hearings are scheduled to resume October 15, and said these would form a better basis for determining whether such a plan may be formulated and approved. A committee representing B. & P. stockholders filed the petition for suspension of the hearings.

Northern Pacific Terminal Company of Oregon.—*Amended Operating Agreement.*—Modification of the agreement covering operation of this company's facilities at Portland, Ore., has been approved by the I.C.C. The amendments, among other things, redefine zones of the terminal and make some changes in apportionment of operating costs. (*Railway Age*, July 23, page 63.) The basic contract covering operation of the terminal has been in effect since 1932. Roads using the terminal facilities are: Oregon-Washington Railroad & Navigation Co. and its lessee, the Union Pacific; the Southern Pacific, and Northern Pacific.

New Securities

Application has been filed with the I.C.C. by:

DONORA SOUTHERN.—To issue three promissory notes in the aggregate amount of $258,500 to its parent, United States Steel Corporation, to evidence loans obtained for the purchase of a diesel-electric locomotive and for "general rehabilitation" work. A 2¾ per cent note for $93,500 would evidence the diesel-financing loan; and it would be payable in 11 annual installmets of $8,000 each, plus a final installment of $5,500. The other two notes, for $100,000 and $65,000, would evidence the loans for "general rehabilitation" work. They would be demand notes, bearing interest at 4 per cent if earned, and, if not, the amount earned.

LEHIGH & NEW ENGLAND.—To assume liability for $1,875,000 of series M equipment trust certificates to finance in part 500 all-steel, center-dumping hopper cars. The cars, to be acquired from American Car & Foundry Co., will cost an estimated $4,731 each, or a total of $2,365,505. The certificates would be dated December 1 and would mature in 15 annual installments of $125,000 each, beginning December 1, 1952. They would be sold on the basis of competitive bids, with the interest rate to be set by such bids.

Dividends Declared

GEORGIA RAILROAD & BANKING CO.—$1.75, quarterly, payable October 15 to holders of record October 1.

NORFOLK SOUTHERN.—75¢, quarterly, payable December 15 to holders of record December 1.

NORTHERN OF NEW HAMPSHIRE.—$1.50, quarterly, payable October 31 to holders of record October 11.

ONTARIO & QUEBEC.—$3, semiannual, payable in Canadian funds on December 1 to holders of record November 1.

WESTERN PACIFIC.—75¢, quarterly, payable November 15 to holders of record November 1.

Security Price Averages

	Oct. 16	Prev. Week	Last Year
Average price of 20 representative railway stocks	57.00	57.35	49.17
Average price of 20 representative railway bonds	92.90	93.46	95.95

RAILWAY OFFICERS

EXECUTIVE

Allan T. Danver, chief engineer of the RUTLAND at Rutland, Vt., has been appointed special executive assistant.

FINANCIAL, LEGAL & ACCOUNTING

Edward F. Koncel, Sr., former file clerk on the CHICAGO & EASTERN ILLINOIS, has been named land and tax commissioner, with headquarters in Chicago.

Patrick C. Mullen, general attorney for the CHICAGO & EASTERN ILLINOIS, has been promoted to assistant general solicitor, with headquarters in Chicago.

As reported in *Railway Age* September 3, **Everett W. Smith** has been elected treasurer of the BOSTON & MAINE at Boston. Mr. Smith was

(*Continued on page 67*)

Economical and *Fast* Steam Generation For *all* purposes with the *Elesco* Automatic Steam Generator

Push 2 controls and the generator operates automatically.

It saves space and weight.

Low investment cost.

Quick installation.

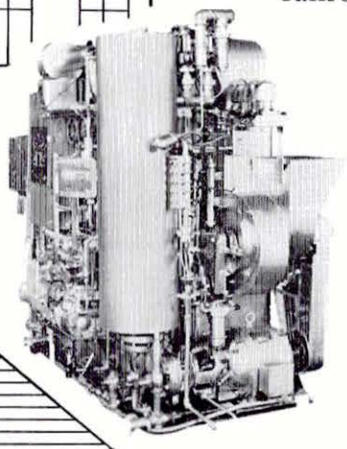
Steam is available in 3 minutes after generator is started.

Dependable safety controls.

Employs Controlled Recirculation... an advanced engineering principle.

It is built by a leader in the design and manufacture of steam generating equipment, whose name-plate is on many of the world's outstanding and largest steam generators in public utility and industrial steam plants.

If you want the best in automatic steam generators, you will specify ELESCO... a name that has dependably served the railroads for many years.



THE
SUPERHEATER CO., INC.
Division of
COMBUSTION ENGINEERING-SUPERHEATER, INC.
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Montreal, Canada, THE SUPERHEATER COMPANY, Ltd.
Representing AMERICAN THROTTLE COMPANY, INC.

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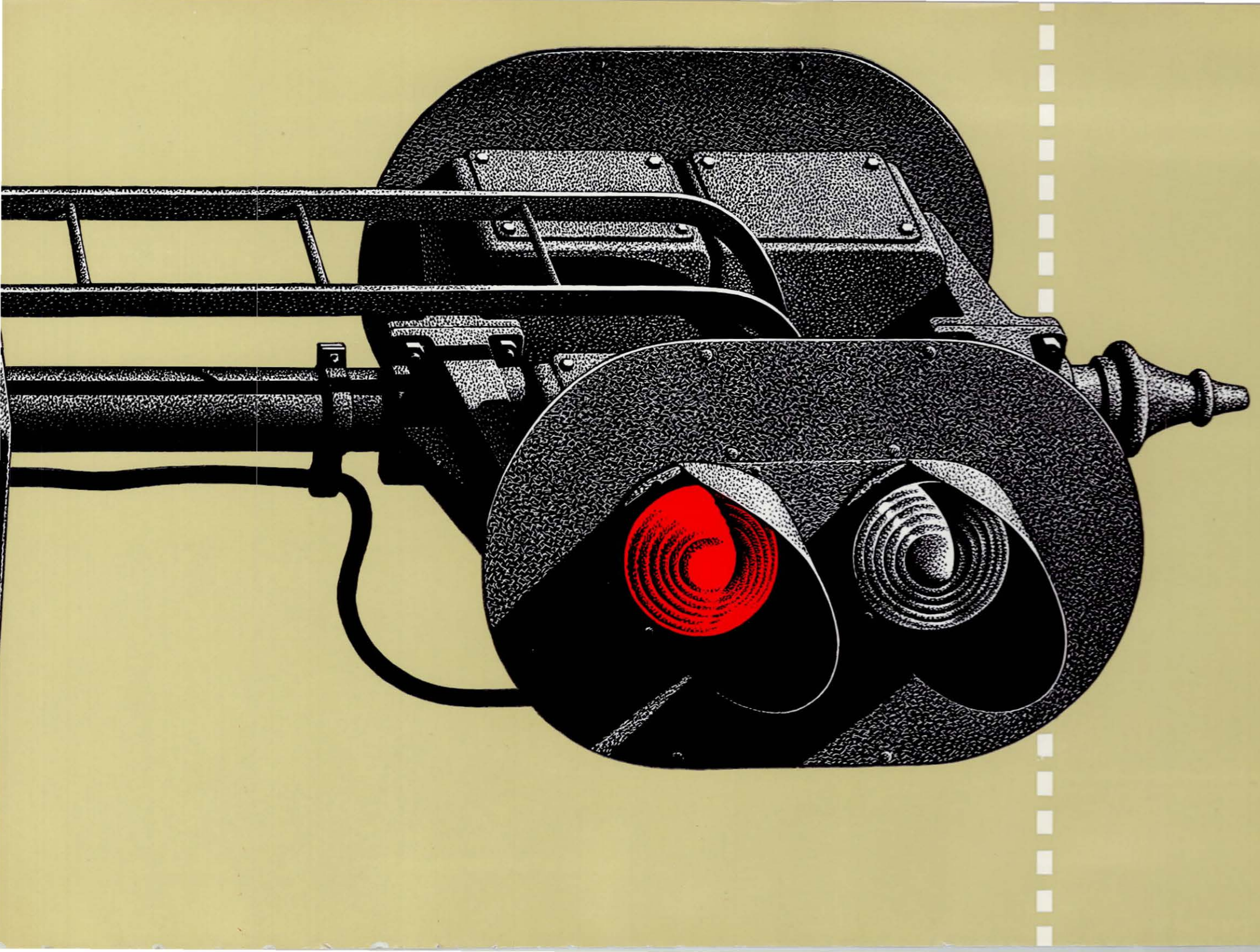
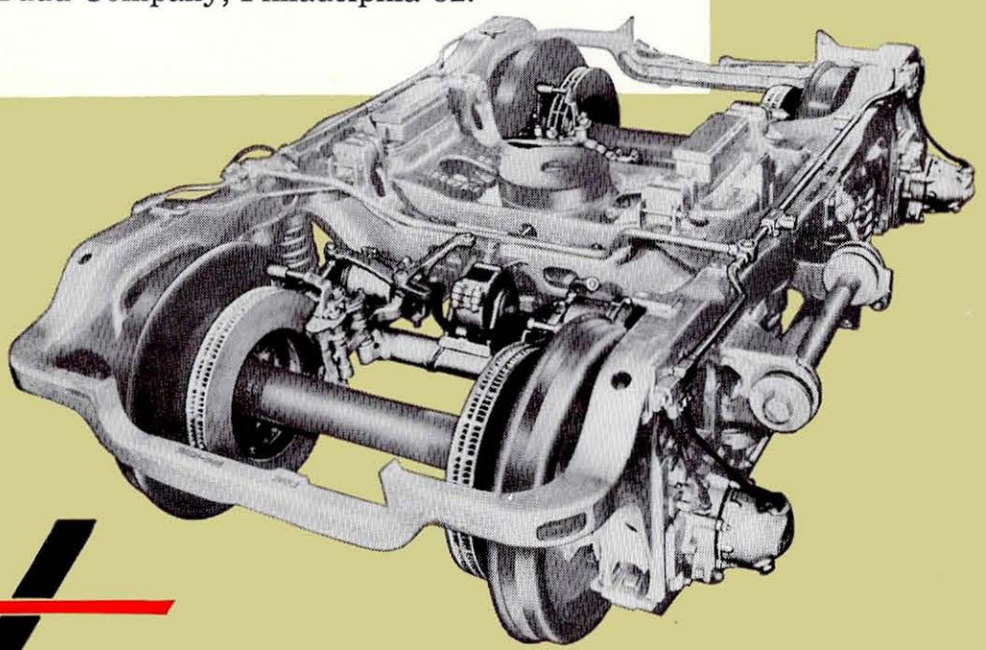


SAFETY STARTS IN STOPS!

● For service or emergency stops, the Budd Model CF disc brake provides amazingly smooth, fast, quiet stops. *Only* the Budd disc brake exerts maximum and constant deceleration from the moment of application . . . can be applied for as long as needed without fear of exceeding its thermal capacity. It all adds up to matchless safety and comfort.

What's more—the Budd railway passenger car disc brake offers proved savings in maintenance. Brake shoes last many times longer. And, since the shoe never touches the wheel, it cannot heat-check the wheel.

The Budd Company, Philadelphia 32.



Budd

HOW LONG WILL THE INSULATION LAST?

Streamlite HAIRINSUL
Outlasts the Life of the Car!

The installation of Streamlite Hairinsul into new refrigerator cars is a one-time investment, because it *outlasts the life of the car,* and can be used again and again.

The successful use of all-hair Hairinsul in refrigerator cars for nearly half a century is the best testimony that service conditions never impair its high insulating efficiency.

Some of the major reasons why Streamlite Hairinsul is specified by leading refrigerator car lines are given at the right. Write for complete data.

1 LOW CONDUCTIVITY. Thoroughly washed and sterilized, all-hair heat barrier. Rated conductivity—.25 btu per square foot, per hour, per degree F., per inch thick.

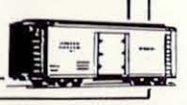
2 LIGHT WEIGHT. Advanced processing methods reduce weight of STREAMLITE HAIRINSUL by 40%.

3 PERMANENT. Does not disintegrate when wet, resists absorption. Will not shake down, is fire-resistant and odorless.

4 EASY TO INSTALL. Blankets may be applied to car wall in one piece, from sill to plate and from one side door to the other. Self-supporting in wall sections between fasteners.

5 COMPLETE RANGE. STREAMLITE HAIRINSUL is available ½" to 4" thick, up to 127" wide. Stitched on 5" or 10" centers between two layers of reinforced asphalt laminated paper. Other weights and facings are available.

6 HIGH SALVAGE VALUE. The all-hair content does not deteriorate with age; therefor has high salvage value. No other type of insulation offers a comparable saving.



Dept. H-110, Merchandise Mart, Chicago 54, Ill.

(*Continued from page* 62)
graduated from Yale University in 1936 and served for five years with the Marine Corps. After World War

Everett W. Smith

II he was associate trust officer of the New England Trust. In April 1948 Mr. Smith joined the B.&M. as assistant treasurer, and one year later was appointed assistant to vice-president—finance, which position he held until his recent election as treasurer.

OPERATING

William D. Lamprecht has been named assistant general manager of the SOUTHERN PACIFIC, with headquarters in San Francisco (*Railway Age*, October 1), to succeed the late **Howard R. Hughes.** Mr. Lamprecht joined the S.P. as a junior clerk in the general manager's office shortly after completing his schooling in San Francisco in 1925, and later held secretarial and clerical positions on various divisions, including the position of

William D. Lamprecht

chief clerk of the coast division. In 1939 he was appointed assistant trainmaster on the Salt Lake division, following which he was trainmaster on the Sacramento and Coast divisions, and assistant superintendent on the San Joaquin division. In October 1945 he was appointed assistant manager of personnel, becoming first assistant manager of personnel on March 1, 1949, from which position he has now been promoted.

H. A. Sanders, assistant to vice-president and general manager of the GRAND TRUNK WESTERN, has been appointed general superintendent, with headquarters at Detroit, succeeding **A. C. McCarthy,** recently appointed general manager. **W. W. Byam** has been named assistant to general manager — labor relations. Mr. Sanders has had 30 years of service with the G.T.W. He began his railway career as a trainmaster's clerk in Battle Creek, Mich., in 1920, and in 1924 be-

H. A. Sanders

came secretary to the assistant general manager at Detroit. In 1930, he was promoted to secretary to the vice-president and general manager. He was appointed chief clerk to the general superintendent at Detroit in 1941, and two years later went to Durand, Mich., as trainmaster. He became assistant to vice-president and general manager at Detroit in 1949.

TRAFFIC

G. Howard Ingalls, who has been appointed assistant freight traffic manager of the NEW YORK CENTRAL SYSTEM at Cleveland (*Railway Age*, October 8), was born at Cincinnati and joined the N.Y.C. at New York in 1927 as a traveling car agent. He transferred to the traffic department in 1929 and was named general agent at New York in 1938. Three years later he was appointed assistant general eastern freight agent, transferring to Albany, N. Y., in April 1943 as assistant general freight agent. Six months later Mr. Ingalls became general freight agent at Washington and in 1946 was promoted to assistant to freight traffic manager at Cincinnati, transferring to Cleveland in 1948.

As reported in *Railway Age* October 1, **R. F. Robinson** has been appointed manager, merchandise traffic, of the SOUTHERN PACIFIC at San Francisco. Mr. Robinson has been with the S.P. since 1914; for the past 10 years his activities have been closely related to merchandise freight

R. F. Robinson

operations. He was general agent, merchandise traffic, at the time of his recent appointment.

As reported in *Railway Age* October 1, **R. A. Houck** has been appointed assistant to freight traffic manager—Central district of the SOUTHERN PACIFIC at San Francisco. Mr. Houck, with 23 years of S.P. service,

R. A. Houck

recently has been the road's district freight and passenger agent at Fresno. He started as a clerk in San Francisco and at various times has been located at Oakland, Salt Lake City and Klamath Falls.

PURCHASES & STORES

As reported in *Railway Age* October 1, **George W. Bohannon,** chief mechanical officer of the CHICAGO & NORTH WESTERN, has been appointed manager, purchases and stores, of the PULLMAN COMPANY, a newly-established position. Mr. Bohannon was born at Duluth, Minn., on December

(*Continued on page* 70)

OPERATING REVENUES AND OPERATING EXPENSES OF CLASS I STEAM RAILWAYS

Compiled from 172 monthly reports of revenues and expenses representing 131 Class I steam railways

(Switching and Terminal Companies Not Included)

FOR THE MONTH OF JULY 1951 AND 1950

Item	United States		Eastern District		Southern District		Western District	
	1951	1950	1951	1950	1951	1950	1951	1950
Miles of road operated at close of month	225,869	226,377	53,257	53,334	45,946	46,090	126,666	126,953
Revenues:								
Freight	$674,007,715	$639,728,547	$249,081,660	$235,948,547	$136,414,447	$122,682,793	$288,511,608	$281,097,207
Passenger	80,602,340	76,006,099	40,893,134	39,949,102	12,108,405	10,610,479	27,600,801	25,446,518
Mail	18,427,412	17,014,735	7,194,900	6,425,464	3,110,300	2,851,553	8,122,212	7,737,718
Express	5,408,026	5,173,230	1,793,709	1,035,320	747,254	561,718	2,867,063	3,576,192
All other operating revenues	38,366,166	34,238,145	16,931,926	14,785,778	6,254,042	5,380,006	15,180,198	14,072,361
Railway operating revenues	816,811,659	772,160,756	315,895,329	298,144,211	158,634,448	142,086,549	342,281,882	331,929,996
Expenses:								
Maintenance of way and structures	137,317,926	109,991,699	45,924,328	39,264,717	26,056,590	22,005,926	65,337,008	48,721,056
Depreciation	11,214,659	11,015,055	4,635,604	4,665,016	2,080,615	1,981,802	4,498,440	4,368,237
Retirements	1,463,292	1,352,617	1,046,954	468,555	211,761	258,657	204,577	625,405
Deferred maintenance	*169,770	*122,402	*136,632	.....	*33,138	*63,963	.....	*58,439
Amortization of defense projects	172,974	137,022	36,783	15,888	58,088	31,043	78,103	90,091
Equalization	*2,494,676	*1,820,790	*2,618,029	*1,756,168	668,654	479,323	*545,301	*543,945
All other	127,131,447	99,430,197	42,959,648	35,871,426	23,070,610	19,319,064	61,101,189	44,239,707
Maintenance of equipment	164,202,825	135,174,537	64,940,573	56,757,612	32,770,624	26,127,884	66,491,628	52,289,041
Depreciation	26,021,887	24,780,771	9,642,454	9,181,120	5,834,472	5,563,620	10,544,961	10,036,031
Retirements	*122,572	*67,324	*5,796	*24,168	*23,774	*27,317	*93,002	*15,839
Deferred maintenance and major repairs	*499,703	*139,806	*497,806	*51,307	*1,897	*30,846	.....	*57,653
Amortization of defense projects	6,136,749	1,217,225	2,461,604	451,445	1,343,752	234,033	2,331,393	531,747
Equalization	*231,386	261,796	89,700	61,051	*697,448	*417,584	376,362	618,329
All other	132,897,850	109,121,875	53,250,417	47,139,471	26,315,519	20,805,978	53,331,914	41,176,426
Traffic	17,620,127	15,670,415	5,813,148	5,339,052	3,680,550	3,232,977	8,126,429	7,098,386
Transportation—Rail line	327,604,202	286,307,614	135,935,714	120,757,613	57,228,184	49,786,604	134,440,304	115,763,397
Miscellaneous operations	11,294,048	9,775,432	3,653,296	3,268,881	1,571,445	1,377,453	6,069,307	5,129,098
General	25,784,428	22,196,489	9,762,031	8,890,951	5,365,210	4,688,935	10,657,187	8,616,603
Railway operating expenses	683,823,556	579,116,186	266,029,090	234,278,826	126,672,603	107,219,779	291,121,863	237,617,581
Net revenue from railway operations	132,988,103	193,044,570	49,866,239	63,865,385	31,961,845	34,866,770	51,160,019	94,312,415
Railway tax accruals	73,139,048	93,824,366	25,775,495	28,353,371	19,012,396	19,947,444	28,351,157	45,523,551
Pay-roll taxes	24,512,567	21,997,222	9,911,600	9,166,027	4,643,598	4,087,998	9,957,369	8,743,197
Federal income taxes†	19,331,846	44,341,253	5,389,140	9,477,470	8,262,424	9,936,433	5,680,282	24,927,350
All other taxes	29,294,635	27,485,891	10,474,755	9,709,874	6,106,374	5,923,013	12,713,506	11,853,004
Railway operating income	59,849,055	99,220,204	24,090,744	35,512,014	12,949,449	14,919,326	22,808,862	48,788,864
Equipment rents—Dr. balance	14,263,225	11,800,411	5,367,630	5,621,030	*896,737	*2,276,280	9,792,332	8,455,661
Joint facility rent—Dr. balance	3,650,845	3,262,457	1,819,209	1,579,068	439,103	443,880	1,392,533	1,239,509
Net railway operating income	41,934,985	84,157,336	16,903,905	28,311,916	13,407,083	16,751,726	11,623,997	39,093,694
Ratio of expenses to revenues (percent)	83.7	75.0	84.2	78.6	79.9	75.5	85.1	71.6

FOR THE SEVEN MONTHS ENDED WITH JULY 1951 AND 1950

Item	United States		Eastern District		Southern District		Western District	
	1951	1950	1951	1950	1951	1950	1951	1950
Miles of road operated at close of month	225,966	226,519	53,287	53,358	45,956	46,125	126,723	127,036
Revenues:								
Freight	$4,910,233,740	$4,175,350,947	$1,818,903,003	$1,566,944,308	$1,036,426,648	$871,166,407	$2,054,904,089	$1,737,240,232
Passenger	511,225,730	452,147,797	258,670,746	241,586,224	82,936,216	69,665,352	169,618,768	140,896,221
Mail	138,461,238	123,973,017	53,816,887	45,241,256	22,889,608	21,905,003	61,754,743	56,826,758
Express	43,340,365	38,897,774	13,741,973	10,834,300	7,528,212	7,049,726	22,070,180	21,013,748
All other operating revenues	249,427,085	205,498,496	112,362,693	90,852,712	43,540,145	34,945,903	93,524,247	79,699,881
Railway operating revenues	5,852,688,158	4,995,868,031	2,257,495,302	1,955,458,800	1,193,320,829	1,004,732,391	2,401,872,027	2,035,676,840
Expenses:								
Maintenance of way and structures	856,895,287	716,957,999	301,298,537	248,734,255	183,756,938	153,759,384	371,839,812	314,464,360
Depreciation	77,984,477	75,820,953	32,222,023	31,713,897	14,449,456	13,658,916	31,312,998	30,448,140
Retirements	8,864,384	7,452,213	3,788,214	2,400,937	1,201,943	1,443,218	3,874,227	3,608,058
Deferred maintenance	*1,260,728	*1,274,952	*1,204,305	*800,000	*56,424	*198,556	1	*276,396
Amortization of defense projects	972,254	1,051,227	96,161	125,308	251,274	309,067	624,819	616,852
Equalization	7,933,304	3,785,887	879,707	449,071	6,451,828	4,968,801	601,769	*1,631,985
All other	762,401,596	630,122,671	265,516,737	214,845,042	161,458,861	133,577,938	335,425,998	281,699,691
Maintenance of equipment	1,147,157,305	943,770,824	475,586,603	392,588,558	229,075,071	185,140,411	442,495,631	366,041,855
Depreciation	179,529,313	170,839,403	65,197,722	63,422,592	40,434,943	38,368,337	73,895,648	69,048,474
Retirements	$1,582,684	*329,339	*883,092	*58,430	*410,931	*154,692	*288,661	*116,217
Deferred maintenance and major repairs	*11,240,601	*8,942,759	*11,099,098	*8,503,403	*14,387	*92,488	*127,116	*346,868
Amortization of defense projects	24,656,421	8,540,387	9,850,176	3,160,402	5,406,907	1,656,107	9,399,338	3,723,878
Equalization	311,065	2,451,005	98,754	1,841,028	1,026,813	453,439	*814,502	156,538
All other	955,484,791	771,212,127	412,422,141	332,726,369	182,631,726	144,909,708	360,430,924	293,576,050
Traffic	123,065,265	111,195,605	40,995,707	37,704,358	25,984,091	23,253,445	56,085,467	50,237,802
Transportation—Rail line	2,283,077,445	1,942,237,420	962,999,194	825,807,212	414,877,655	355,281,713	905,200,596	761,148,495
Miscellaneous operations	71,906,731	62,559,446	24,962,944	22,508,786	11,334,328	9,615,388	35,609,459	30,435,272
General	177,027,970	156,536,812	67,556,666	60,714,624	37,732,621	33,449,789	71,738,683	62,372,399
Railway operating expenses	4,659,130,003	3,933,258,106	1,873,399,651	1,588,057,793	902,760,704	760,500,130	1,882,969,648	1,584,700,183
Net revenue from railway operations	1,193,558,155	1,062,609,925	384,095,651	367,401,007	290,560,125	244,232,261	518,902,379	450,976,657
Railway tax accruals	643,599,245	527,361,340	198,062,631	175,589,405	160,999,780	125,749,182	284,536,834	226,022,753
Pay-roll taxes	166,599,206	147,134,520	68,205,797	60,337,119	31,987,551	27,985,882	66,405,858	58,811,519
Federal income taxes†	272,604,842	190,464,793	56,625,157	47,232,879	85,549,510	56,973,534	130,430,175	86,258,380
All other taxes	204,395,197	189,762,027	73,231,677	68,019,407	43,462,719	40,789,766	87,700,801	80,952,854
Railway operating income	549,958,910	535,248,585	186,033,020	191,811,602	129,560,345	118,483,079	234,365,545	224,953,904
Equipment rents—Dr. balance	94,263,337	80,770,537	40,799,291	37,931,027	*522,215	*5,949,430	53,986,261	48,788,940
Joint facility rent—Dr. balance	25,256,331	22,662,100	12,264,612	10,647,342	3,447,598	3,521,246	9,544,121	8,493,512
Net railway operating income	430,439,242	431,815,948	132,969,117	143,233,233	126,634,962	120,911,263	170,835,163	167,671,542
Ratio of expenses to revenues (percent)	79.6	78.7	83.0	81.2	75.7	75.7	78.4	77.8

† Includes income tax, surtax, and excess profits tax.
* Decrease, deficit, or other reverse item.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

WHY RISK...

...TODAY'S HIGH PRICED LADING?

...use PEERLESS PROTECTION, the H-1-B2 your best insurance against loss!

PEERLESS EQUIPMENT COMPANY

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MORE THAN A FIRE LOSS

. . . a costly tieup all along the line

. . . a costly repair job coming up

. . . future loss in operating revenue during this Diesel's time down

Prevent these losses !

INSTALL PYRENE DIESEL FIRE-FIGHTING SYSTEMS

First Choice **OF AMERICA'S RAILROADS**

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PYRENE MANUFACTURING COMPANY

678 Belmont Avenue, Newark 8, New Jersey

Affiliated with C-O-Two Fire Equipment Co.

Pyrene Manufacturing Co. of Canada, Limited: 91 E. Don Roadway, Toronto

The Pyrene Company, Limited: 9 Grosvenor Gardens, London, S.W. 1

(*Continued from page 67*)

2, 1902, and was graduated from the University of Minnesota (B. S. in M. E. 1926). He entered railroad service in 1926 as a draftsman on the

George W. Bohannon

Duluth, Missabe & Northern (now Duluth, Missabe & Iron Range) and the following year became mechanical engineer. Mr. Bohannon held the latter position until 1944, when he became assistant to chief mechanical officer in charge of mechanical engineering of the C. & N. W. and the Chicago, St. Paul, Minneapolis & Omaha. The following year he was appointed assistant chief mechanical officer and in 1948, chief mechanical officer, of those roads.

As reported in *Railway Age* September 24, **D. E. Frank** has been appointed stores manager of the PENNSYLVANIA system at Philadelphia. Prior to graduation from high school and for some months thereafter, Mr. Frank was employed at the Duncannon Iron Works as a laborer, roll hand and puddler helper. He entered the

D. E. Frank

service of the Pennsylvania on November 14, 1916, as a laborer at Harrisburg, Pa., later becoming clerk in the storekeeper's office there. He subsequently served as acting storekeeper, storekeeper and assistant works store-

Unicel

the first really new freight car in 52 years—

coming your way!

Good news for railroads who must build up larger fleets to meet the demands of a growing nation—and a growing economy.

UNICEL has been thoroughly pre-tested on the road and in the laboratory. It it now undergoing official road tests on one of the nation's largest railroads.

Built on the modern science of cellular laminates — stronger, more durable, lighter than conventional steel cars of equal size by over 15,000 pounds — UNICEL can carry a 65 ton payload!

That means less dead weight to haul — greater earning capacity.

Uses less steel than conventional cars and lends itself to modern, mass production techniques.

Goods are carried with greater safety in UNICEL. A specially cushioned floating draft gear absorbs impact shock and pull jolts — results in 66% less road shock! Operating costs and maintenance costs will be less.

Built-in Unistrapping eliminates dunnage, secures loads safely and easily. Smooth interior has no cracks, pockets or corners to hold dirt. Wider doors mean easier loading. The addition of an inner wall, special insulation and a mechanical refrigerating unit quickly convert UNICEL to a refrigerator car with 75% more *capacity* than a conventional 40 foot car of comparable weight.

Get full information today. Write—

PRESSED STEEL CAR COMPANY, INC.

6 No. Michigan Avenue, Chicago, Illinois • 230 Park Avenue, New York

keeper. Mr. Frank was promoted to works storekeeper at Altoona, Pa., on June 1, 1943, which position he held until his recent promotion.

ENGINEERING AND SIGNALING

P. G. Seaholm, assistant superintendent of signals on the GREAT NORTHERN, has been appointed superintendent of signals, with headquarters at St. Paul, succeeding **H. E. Brashares,** retired *(Railway Age,* October 8). Mr. Seaholm entered railroad service in 1919 as signal maintainer's helper for the G. N. His subsequent career on the same road included the positions of signal maintainer, signal inspector, signal draftsman and signal office engineer between 1919 and 1932. In 1933 he became signal draftsman and in 1938 was appointed assistant superintendent of signals.

Mr. Brashares graduated in electrical engineering from Armour Institute of Technology in 1905, and entered the signal department of the Illinois Central in September of that year as draftsman and inspector. In April 1907 he joined the Continental Signal Company in Chicago as designing engineer. In June 1910 he was appointed signal supervisor for the Chicago & Western Indiana, and became signal inspector for the G. N. in October 1911. He was appointed assistant signal engineer of that road in November 1912, assistant superintendent of signals in April 1924, and appointed superintendent of signals in May 1938.

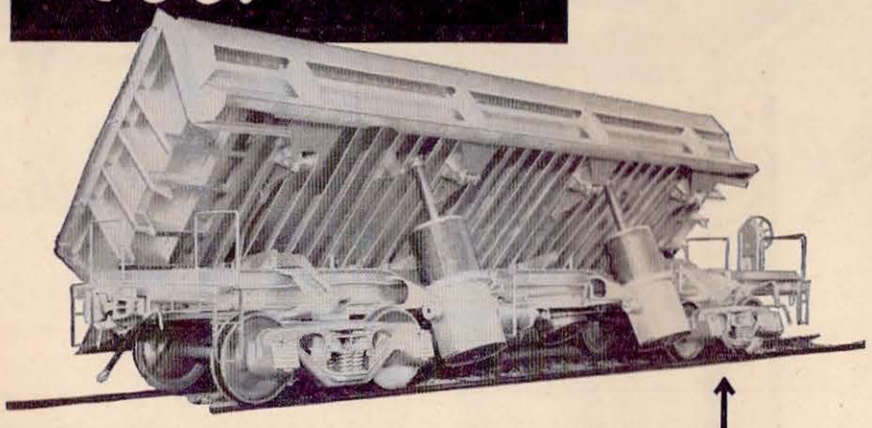
P. G. Seaholm

SPECIAL

As reported in *Railway Age* September 24, **Raymond F. Blosser** has been appointed manager of public relations of the NEW YORK CENTRAL SYSTEM at New York. Mr. Blosser was born on January 6, 1913, at Dayton, Ohio, where he started newspaper work with the Dayton News. He was with the Associated Press at Cleveland from 1935 to 1943, serving for a time as head of that A.P. bureau before joining the Jersey Central Lines on January 1, 1944, as director of information. Mr. Blosser was an account executive with Verne Burnett Associates, a New York public relations firm,

Raymond F. Blosser

BOOSTS EARNINGS TOO!



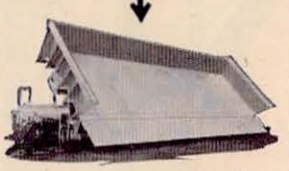
The Differential Air Dump Car has a way with operating expenses — cuts 'em down!

There's another pair of massive muscles on the other side of the car, too, means two-way dumping and greater flexibility.

They're built to take rough treatment — whether it's the slam-banging of the clam or the sudden dumping of tons of hot slag. These cars can take it and can come back faster for more.

Higher ratio of payload to dead weight! Fewer trips to the shop and shorter stays when they do go! Add all these up and it spells lower operating costs — another way to say "Boosted Earnings". Write for the full story on these cars.

DUMPS BOTH WAYS



Other Differential Products: Locomotives, Mine Cars, Mine Supply Cars, Rock Larries, Mantrip Cars, Dumping Devices and Complete Haulage Systems.

DIFFERENTIAL STEEL CAR COMPANY

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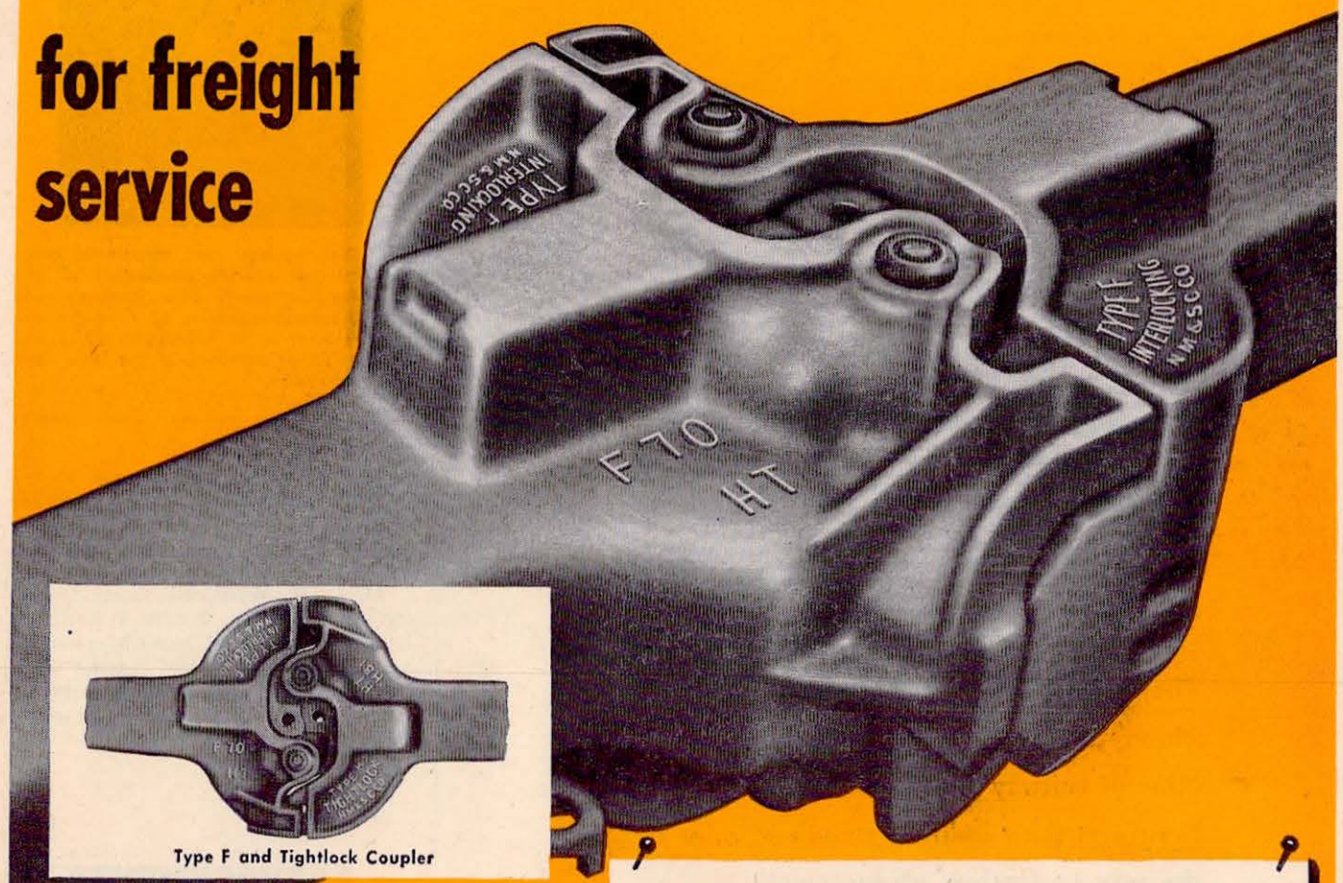
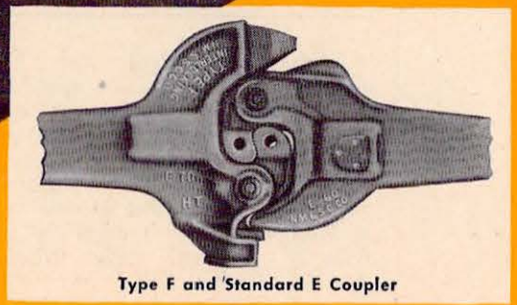
Type "F" INTERLOCKING COUPLER

for freight service



Type F and Tightlock Coupler



Type F and Standard E Coupler

FIVE OF THE IMPORTANT FEATURES

1. **REDUCTION OF FREE SLACK AND INTERLOCKING.** Type F design with interlocking feature means considerably less free slack yet it meets all operating conditions of standard E Coupler.
2. **INTERCOUPLING.** Type F design can be used with any standard A. A. R. coupler.
3. **UTILITY.** Due to interlocking feature, mated F Couplers prevent vertical slipovers . . . resist climbing and overturning.
4. **SAFETY LEDGE.** Designed to support mated coupler in event of pullout.
5. **LOWER MAINTENANCE.** Less vertical movement and less free slack mean Type F Coupler contours hold within gage longer for lower maintenance cost.

Keeping pace with advanced thinking and planning in promoting design of the Type F Coupler, *National* is ready *now* for maximum production.

The well-recognized facilities involving engineering design, research and quality controlled production which have made National pre-eminent in the development of improved devices for railroads, continue to be available to meet demands for the Type F Coupler.

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RAILWAY AGE

30 CHURCH STREET,
NEW YORK 7, N. Y.

J. P. Kenney has been appointed manager of car service employees of the Pullman Company. Mr. Kenney, who will have headquarters at Chicago, entered service with Pullman in 1911 and became superintendent of the New York zone in 1945

prior to entering the service of the N.Y.C. on July 1, 1947, as manager of the press bureau. He held the latter position until his recent appointment.

D. L. M. Winfield, safety inspector on the ELGIN, JOLIET & EASTERN, has been appointed superintendent of employment, personnel department, with offices at Joliet, Ill. **Raymond T. Brasel** has been appointed supervisor of personnel, with offices in Chicago.

ABANDONMENTS

Alabama Central.—The I.C.C. has dismissed this road's application for authority to abandon its entire line between Jasper, Ala., and Marigold, approximately 10 miles. The road requested the dismissal after negotiating for continued operation of coal mines at Marigold, which provide the road with its principal traffic (*Railway Age*, July 2, page 84).

Chesapeake & Ohio. — The I.C.C. has dismissed, at this road's request, the pending application for authority to abandon a 9-mile line between Williamsburg, Mich., and Elk Rapids. A year of test operation, requested by Elk Rapids and various shippers, showed the line returned a small profit "from the standpoint of the system as a whole."

Chicago & North Western.—The I.C.C., after further hearing, has again denied this road's application for authority to abandon its 37.7-mile branch line between Belle Plain, Iowa, and What Cheer. This is the third time the commission has denied

(Continued on page 77)

Latest Type COMMONWEALTH BOX-EXPRESS CAR TRUCKS

Missouri Pacific Box-Express Car
with latest type Commonwealth BX Trucks

Offer Many Advantages For Commodity Cars In Passenger Train Service . . .

Especially designed to meet the demand for a safe, rugged, practical, light-weight truck for Box-Express Cars operating in passenger train service, this newest type **COMMONWEALTH** Equalized Swing-Motion Truck provides a smoother riding car with greatly reduced upkeep costs.

The swing bolster arrangement permits effective lateral control, assuring smoother riding with less shock and damage to car contents, car body and track structure. The one-piece cast steel truck frame, with integral pedestals machined, insures that the axles are kept in tram at all times, which is most desirable whether plain bearings or roller bearings are used. The **COMMONWEALTH** Trucks may be arranged for either clasp or single shoe type brakes.

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CALIFORNIA

Los Angeles 21, Magneto Sales & Service Co., 751 Towne Ave.
Sacramento 1, Langer & Rifkin, 1116 Fifth Street
San Diego 1, Magneto Sales & Service Co., 1254 Kettner Blvd.
San Francisco 3, Furrer & Uster, Inc., 225—7th St.
San Francisco 3, H. G. Makelim Magneto Repair Co., 1583 Howard Street
Wilmington, Diesel Control Corporation, 218 North Marine Ave.

COLORADO

Denver 3, Central Supply Co., 1171 Lincoln Street

FLORIDA

Jacksonville 1, Spencer Electric Co., Inc., 40 West Beaver Street
Miami 36, Florida Diesel Service Co., 1930 North Miami Ave.

GEORGIA

Atlanta 3, Auto Electric & Magneto Co., 477 Spring Street, N. W.

ILLINOIS

Chicago 16, Illinois Auto Electric Co., 2011—37 Indiana Ave.
Rock Island, Lohse Automotive Service, Inc., 430 North Capitol Ave.

INDIANA

Indianapolis, Gulling Auto Electric Inc., 450 North Capital Ave.

IOWA

Cedar Rapids, Edwards Carburetor & Electric Co., 209 Seventh St., S. E.
Des Moines 9, Electrical Service & Sales Co., 1313 Walnut Street

LOUISIANA

New Orleans 13, John M. Walton, Inc., 1050 Carondelet Street
Shreveport, Vaughan Tractor & Auto Parts Co., 224 Airport Drive

MARYLAND

Baltimore 1, Parks & Hull Automotive Corp., 1033 Cathedral Street

MASSACHUSETTS

Boston 15, W. J. Connell Co., 121 Brookline Ave.

MICHIGAN

Detroit 2, Knorr-Maynard, Inc., 5743 Woodward Ave.

MINNESOTA

Minneapolis 2, Reinhard Bros. Co., Inc., 11 South 9th Street

MISSOURI

Kansas City 8, Electrical & Magneto Service, Inc., 2538 Grand Ave.
St. Louis 23, Diesel Fuel Injection Service Co., 9331 South Broadway

NEBRASKA

Omaha 2, Carl A. Anderson, Inc., 16th and Jones Street

NEW JERSEY

Newark 2, Tire Trading Co., 239 Halsey Street

NEW YORK

Brooklyn 16, E. A. Wildermuth, Inc., 1102 Atlantic Ave.
Brooklyn 32, A & D Diesel Service, Inc., 677 Fourth Ave.
Buffalo 8, Hettrich Electric Service, 1032 Ellicott Street
Syracuse 4, F. A. Crossman, Inc., 943 Genesee Street
Troy, Ehrlich Electric Service, Inc., 200 Fourth Street

OHIO

Cleveland 14, Cleveland Ignition Co., 1301 Superior Ave., N. E.

OKLAHOMA

Tulsa 3, Magneto Ignition Co., 701 West 5th Street

OREGON

Portland 14, Automotive Products, Inc., 1700 Southeast Grand Ave.

PENNSYLVANIA

Philadelphia 32, J. W. Parkin, Jr., 2251 North Broad Street
Pittsburgh 13, Automotive Ignition Co., 6358 Penn Ave.

TENNESSEE

Memphis 4, Automotive Electric Service Co., 982 Linden Ave.

TEXAS

Dallas 1, Beard & Stone Electric Co., 3909 Live Oak St.
El Paso, Oakes Battery & Electric Co., 423 Texas Street
Houston 1, Beard & Stone Electric Co., Milam at Polk Street
Houston 11, Magneto & Diesel Injector Service, 6931 Navigation Blvd.
Odessa, Electric Service & Supply, 1601 North Grant Street

VIRGINIA

Norfolk, Diesel Injection Sales & Service, 808 Union Street
Richmond 20, Charles H. Woodward Electric Co., 709 Broad Street

WASHINGTON

Seattle 1, Seattle Injector Co., 2706—2nd Ave.
Seattle 14, Sunset Electric Co., 300 Westlake, North
Spokane 8, Sunset Electric Co., North 703 Division St.

WISCONSIN

Milwaukee 2, Wisconsin Magneto Co., 918 North Broadway

CANADA

Quebec—Montreal—International Electric Co., 1037 Bleury St.
British Columbia—Vancouver—Magneto Sales & Service, Ltd., 126 Gore Ave.

ALASKA, Ter. of

Anchorage, Reeve Alaska Airmotive, Merrill Field, P.O. Box 1160

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(*Continued from page 74*)
the C. & N. W.'s proposal to abandon the line. Previous applications for authority were turned down in 1943 and 1945. Among those opposing abandonment of the line was the Iowa State Commerce Commission. The I.C.C. said evidence submitted did not support the road's contention that motor carriers in the area could provide satisfactory substitute service for the rail line. The commission also noted that accounting methods used by the road show the line to be operated at a loss, while the state commission's accounting procedures indicate a profit. The commission was "not convinced" that railroad evidence on losses was sufficient to justify granting the abandonment application.

Chicago & North Western.—The I.C.C. certificate authorizing this road to abandon its 7.5-mile line between Gillette, Wis., and Oconto Falls became effective October 12. The effective date of the certificate had been indefinitely postponed while the commission considered a petition for reconsideration filed by protestants. (*Railway Age*, August 13, page 79.) The petition was denied.

Division 4 of the I.C.C. has **authorized:**

ILLINOIS TERMINAL.—To abandon its 2.7-mile branch line in the vicinity of Ogden, Ill. Division 4 noted that much traffic has been lost to trucks, and said there is "no indication" the line can recapture such losses.

INDIANA & MICHIGAN ELECTRIC CO.—To abandon its entire line, 0.3 mile, in Fort Wayne, Ind., and abandon operation under trackage rights over approximately 1.1 miles of Fort Wayne Transit line. Division 4 said traffic available for movement over the line is insufficient to warrant continued operation (*Railway Age*, August 13, page 79).

LEHIGH VALLEY.—To abandon its so-called Welshtown branch, 0.7 mile, in Lehigh county, Pa. The line is in poor condition and operation over it was suspended in December 1950.

MISSOURI PACIFIC.—To abandon a 15.6-mile portion of its so-called Weeping Water branch, extending from Crete Junction, Neb., to Otoe. Division 4 noted that operation of the line has resulted in substantial losses for several years. The commission in 1944 turned down the road's request for authority to abandon this line, but said the road could renew its application after the end of the war then in progress.

SOUTHERN PACIFIC.—To abandon operation over a segment of its subsidiary, the Central Pacific, between Lookout, Ore., and Fall Creek, approximately 19.5 miles. The C.P. will abandon the line. At the same time the commission authorized the C.P. to acquire, and the S.P. to operate, a substitute line, now under construction by the U.S. government, between Lookout and Jasper, approximately 22.2 miles. This abandonment and acquisition is required because waters from the so-called Lookout Point dam and reservoir will eventually inundate present trackage. In approving relocation of the S.P. line, the commission refused to permit abandonment of a 2.7-mile segment between Fall Creek and Jasper. The S.P. will continue to operate over this segment as a branch line.

Application has been filed with the I.C.C. by:

COLORADO & WYOMING.—To abandon an 11.7-mile branch of its so-called Southern division. The line, extending from Weston, Colo., to Tercio, formerly served coal mining and coking operations at Tercio, but those operations have been abandoned.

LOUISVILLE & NASHVILLE.—To abandon its Bloomfield branch, 26.7 miles, from Shelbyville, Ky., to Bloomfield. The L.&N. said the line has operated at "substantial losses" and there is no prospect of improvement.

VERDE TUNNEL & SMELTER RAILROAD.—To abandon its entire line, approximately 11 miles, extending from Clarkdale, Ariz., via Hopewell to Jerome. The line has served a mine at Jerome but the mine will discontinue operations early in 1952 and the road will no longer be needed.

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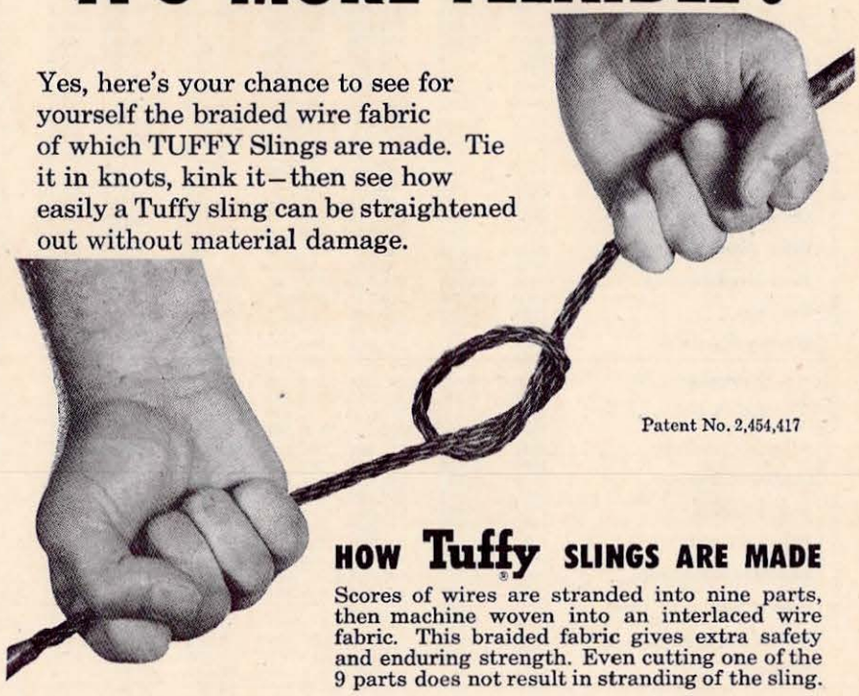

Patent No. 2,454,417

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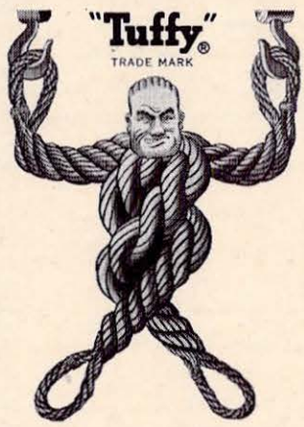
There are 11 different types of Tuffy Slings, each one proof-tested to *twice* its safe working load. And the safe working load is plainly marked on metal tags on each sling. Also, Union Wire Rope engineers will help work out special sling problems. If you have your own rigging loft, Tuffy braided wire fabric is available by the reel.



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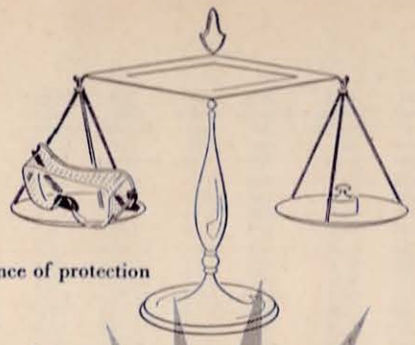
Freight Operating Statistics of Large Steam Railways — Selected

Region, Road and Year		Miles of road operated	Locomotive Miles: Train-miles	Locomotive Miles: Principal and helper	Locomotive Miles: Light	Car Miles: Loaded (*thousands*)	Car Miles: Per cent loaded	Ton-miles (*thousands*): Gross excl.locos & tenders	Ton-miles (*thousands*): Net rev. and non-rev.	Road-locos. on lines: Serviceable: Unstored	Road-locos. on lines: Serviceable: Stored	Road-locos. on lines: B.O.	Road-locos. on lines: Per cent B.O.
New Eng. Region — Boston & Maine	1951	1,691	254,316	261,033	12,567	9,474	71.6	593,100	257,704	83	7	10	10.0
	1950	1,700	255,153	263,645	13,588	10,154	70.7	622,811	265,393	89	4	14	13.1
N. Y., N. H. & Htfd.	1951	1,766	290,404	290,432	20,125	10,492	67.3	677,752	296,578	86	..	8	8.5
	1950	1,771	281,566	282,577	27,741	11,014	68.5	683,379	309,842	102	..	12	10.5
Great Lakes Region — Delaware & Hudson	1951	793	238,454	273,315	19,439	10,400	73.1	718,479	391,337	123	16	26	15.8
	1950	794	237,095	280,604	28,076	10,168	70.9	702,992	374,494	138	35	20	10.4
Del., Lack. & Western	1951	964	268,134	288,840	26,658	11,843	69.7	785,227	361,953	82	10	6	6.1
	1950	965	276,296	293,505	29,337	11,899	69.3	778,809	351,567	81	2	35	29.7
Erie	1951	2,243	614,367	623,929	36,037	31,767	64.5	2,083,489	818,944	191	33	9	3.9
	1950	2,231	665,317	687,697	48,887	34,234	66.6	2,218,209	898,525	187	3	39	17.0
Grand Trunk Western	1951	952	249,985	255,543	1,899	8,118	64.8	552,089	238,168	52	..	18	25.7
	1950	971	273,951	280,418	2,667	9,434	64.6	648,744	281,535	55	..	11	16.7
Lehigh Valley	1951	1,211	238,818	247,977	17,631	11,474	70.9	776,904	378,077	40	5	5	10.0
	1950	1,238	244,885	258,258	24,705	11,982	70.3	808,279	390,642	47	5	24	31.6
New York Central	1951	10,675	2,851,131	3,023,181	153,804	102,409	62.9	7,384,738	3,372,021	948	99	393	27.3
	1950	10,691	3,022,057	3,182,244	186,686	109,322	62.8	7,560,769	3,333,521	957	65	361	26.1
New York, Chic. & St. L.	1951	2,161	771,606	791,891	12,197	29,156	64.2	2,080,573	934,033	196	18	36	14.4
	1950	2,162	738,354	754,622	10,759	28,841	66.7	1,942,360	867,044	194	4	50	20.2
Pitts. & Lake Erie	1951	221	88,738	91,200	10[illegible]	3,664	70.5	303,525	189,516	29	..	17	37.0
	1950	221	87,314	90,583	363	3,724	70.7	304,643	188,690	30	..	16	34.8
Wabash	1951	2,381	496,532	503,735	8,631	19,977	71.1	1,282,369	561,669	132	16	55	27.1
	1950	2,381	581,720	590,259	9,676	24,111	70.1	1,511,596	620,997	151	9	61	27.6
Central Eastern Region — Baltimore & Ohio	1951	6,083	1,688,965	1,944,672	211,007	65,905	62.6	5,069,395	2,512,408	620	80	182	20.6
	1950	6,086	1,787,492	2,154,984	233,194	58,587	63.4	4,726,867	2,288,861	684	31	254	26.2
Central of New Jersey	1951	410	73,693	73,909	3,229	2,772	66.0	207,646	109,397	43	..	4	8.5
	1950	4[illegible]	69,381	69,903	5,153	2,722	66.6	202,346	105,921	37	..	5	11.9
Central of Pennsylvania	1951	210	70,226	76,54[illegible]	11,455	2,628	68.9	192,823	104,163	31	1	4	11.1
	1950	212	69,413	77,851	13,730	2,768	68.4	204,069	110,708	36	..	18	33.3
Chicago & Eastern Ill.	1951	886	130,770	130,770	3,376	4,787	69.0	318,090	153,733	28	..	1	3.4
	1950	886	128,079	128,079	2,405	4,735	69.9	295,804	136,971	25	..	..	..
Elgin, Joliet & Eastern	1951	238	100,071	101,390	252	3,795	65.3	307,051	170,548	43	..	..	..
	1950	238	95,604	96,879	.....	3,507	69.3	267,928	148,932	36	..	4	10.0
Pennsylvania System	1951	10,045	3,196,592	3,451,167	382,704	132,385	65.3	9,518,388	4,641,318	1,205	101	301	18.7
	1950	10,042	3,214,746	3,511,665	410,609	136,717	65.9	9,626,090	4,710,660	1,262	4	381	23.1
Reading	1951	1,311	350,906	361,231	29,839	12,682	65.1	990,674	533,376	169	21	32	14.4
	1950	1,315	338,748	349,007	27,448	13,196	68.0	1,009,821	555,615	174	24	37	15.7
Western Maryland	1951	837	166,203	192,704	20,76[illegible]	5,685	63.3	458,713	251,248	121	9	20	13.3
	1950	837	166,029	190,447	20,4[illegible]	5,805	65.3	463,113	257,442	138	28	13	7.3
Pocahontas Region — Chesapeake & Ohio	1951	5,042	1,332,569	1,398,493	55,400	58,639	57.3	5,039,895	2,769,931	497	7	245	32.7
	1950	5,045	1,376,983	1,464,391	58,957	57,298	58.5	4,757,702	2,588,030	497	21	139	21.2
Norfolk & Western	1951	2,113	677,724	717,652	53,524	30,521	58.0	2,699,514	1,451,797	237	17	26	9.3
	1950	2,105	616,251	641,561	37,799	27,531	59.2	2,339,235	1,236,704	234	37	29	9.7
Southern Region — Atlantic Coast Line	1951	5,434	795,368	796,315	13,314	22,900	62.2	1,613,088	741,954	378	26	120	22.9
	1950	5,480	721,255	722,286	10,544	20,680	65.3	1,395,118	639,413	313	16	90	21.5
Central of Georgia	1951	1,765	243,934	245,467	3,703	6,786	67.8	457,550	211,775	83	6	22	19.8
	1950	1,783	269,359	273,314	4,379	7,044	70.7	455,634	212,665	98	2	10	9.1
Gulf, Mobile & Ohio	1951	2,851	291,917	291,917	314	14,851	72.6	968,731	467,600	80	..	3	3.6
	1950	2,851	326,667	326,667	283	15,646	73.2	990,653	462,742	61	..	4	6.2
Illinois Central	1951	6,539	1,498,599	1,504,141	52,187	52,101	64.1	3,701,566	1,708,421	556	37	66	10.0
	1950	6,543	1,453,929	1,458,844	52,615	52,196	65.3	3,652,158	1,691,891	554	17	85	13.0
Louisville & Nashville	1951	4,757	1,008,063	1,067,588	26,906	31,461	63.6	2,311,702	1,167,876	298	43	80	19.0
	1950	4,770	1,084,464	1,158,284	30,830	33,010	64.2	2,402,699	1,214,746	329	29	119	24.9
Nash., Chatt. & St. Louis	1951	1,049	181,714	184,547	3,091	5,666	74.8	357,802	172,322	55	..	5	8.3
	1950	1,049	208,161	210,689	3,459	6,283	74.6	385,496	179,435	69	..	1	1.4
Seaboard Air Line	1951	4,136	630,003	630,102	1,983	21,681	64.8	1,513,372	695,081	195	80	53	16.2
	1950	4,136	610,147	615,784	3,368	20,101	65.6	1,359,086	616,479	243	70	40	11.3
Southern	1951	6,302	1,129,520	1,134,720	12,651	37,829	70.4	2,392,987	1,092,483	357	37	129	24.7
	1950	6,320	1,144,156	1,152,566	14,411	38,260	70.4	2,400,303	1,084,668	351	39	197	33.6
Northwestern Region — Chicago & North Western	1951	7,893	923,507	939,151	27,262	33,961	66.6	2,442,861	1,103,733	321	20	122	26.3
	1950	7,998	941,609	953,712	24,362	35,361	65.7	2,469,302	1,060,830	295	8	113	27.2
Chicago Great Western	1951	1,441	130,834	130,834	5,301	7,344	71.5	845,206	225,949	30	..	2	6.3
	1950	1,441	110,732	110,850	3,148	6,181	74.2	385,450	176,849	34	..	1	2.9
Chic., Milw., St. P. & Pac.	1951	10,664	1,144,707	1,179,822	39,879	43,383	65.2	3,016,393	1,385,772	404	82	72	12.9
	1950	10,663	1,318,059	1,372,901	51,314	50,922	66.7	3,391,155	1,520,299	437	43	74	13.4
Chic., St. P., Minn. & Omaha	1951	1,606	200,089	205,502	11,097	5,540	66.9	402,928	189,299	63	..	34	35.1
	1950	1,606	211,611	218,235	9,341	6,504	71.2	429,664	193,992	78	..	33	29.7
Duluth, Missabe & Iron Range	1951	566	226,014	227,331	1,905	10,520	50.7	1,092,926	661,479	61	..	7	10.3
	1950	563	195,268	196,622	1,526	10,016	50.4	1,020,282	616,834	50	..	2	3.8
Great Northern	1951	8,309	1,033,288	1,032,366	32,924	42,651	66.1	3,276,440	1,715,891	321	103	65	13.3
	1950	8,220	776,953	773,825	31,606	31,955	64.6	2,445,560	1,271,883	328	86	59	12.5
Minneap., St. P. & S. Ste. M.	1951	4,179	422,055	430,943	6,347	14,040	65.8	989,060	488,602	113	..	18	13.7
	1950	4,179	402,295	407,357	3,911	14,681	70.0	953,932	462,424	105	..	14	11.8
Northern Pacific	1951	6,591	772,696	799,021	38,215	32,120	70.9	2,226,869	1,062,181	324	28	63	15.2
	1950	6,608	891,165	936,447	52,592	38,723	71.6	2,565,990	1,226,104	324	15	63	15.7
Central Western Region — Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1951	13,097	2,436,487	2,564,322	136,417	94,104	64.8	6,591,801	2,619,409	637	47	158	18.8
	1950	13,073	2,780,249	2,936,535	113,650	113,727	65.5	7,744,763	2,899,003	662	77	124	14.4
Chic., Burl. & Quincy	1951	8,788	1,221,966	1,231,886	46,526	54,947	70.1	3,588,843	1,670,281	327	37	136	27.2
	1950	8,796	1,132,291	1,140,955	42,524	48,463	68.7	3,249,959	1,515,663	335	64	148	27.1
Chic., Rock I. & Pac.	1951	7,902	934,746	946,226	21,890	32,996	67.8	2,213,132	1,037,224	234	13	70	22.1
	1950	7,579	648,836	671,127	11,477	22,839	61.2	1,537,811	644,060	215	27	80	24.8
Denver & R. G. Wn.	1951	2,334	289,083	311,244	29,146	13,409	74.5	892,681	427,607	93	43	22	13.9
	1950	2,413	227,222	246,918	22,388	8,406	69.6	552,488	268,904	108	39	22	13.0
Southern Pacific	1951	8,052	2,281,880	2,404,188	308,257	96,642	63.7	6,644,277	2,575,156	704	5	159	18.3
	1950	8,069	2,389,992	2,562,202	368,143	103,231	63.7	7,082,438	2,743,738	766	5	153	16.6
Union Pacific	1951	9,712	2,277,873	2,371,528	173,983	98,789	66.9	6,705,010	2,844,724	577	56	136	17.7
	1950	9,719	2,583,844	2,697,467	204,060	112,484	67.0	7,563,808	3,015,119	584	22	160	20.9
Western Pacific	1951	1,190	224,051	227,798	14,607	11,322	75.6	706,202	334,488	41	24	28	30.1
	1950	1,192	166,208	172,779	15,368	7,610	78.3	465,285	214,785	63	8	26	26.8
Southwestern Region — International-Gt. Northern*	1951	1,104	186,257	186,547	172	5,897	65.8	446,177	211,053	48	..	14	22.6
	1950	1,089	195,440	195,618	1,025	6,734	69.7	486,549	237,572	51	5	10	15.2
Kansas City Southern	1951	886	154,645	154,658	681	8,093	70.8	535,491	254,442	27	11	25	39.7
	1950	886	157,212	160,949	829	8,398	67.6	573,731	265,917	37	4	14	25.5
Mo.-Kans.-Texas Lines	1951	3,230	330,733	340,645	5,441	11,897	70.7	744,270	336,273	85	5	30	25.0
	1950	3,231	427,924	433,271	5,889	15,761	66.5	998,495	444,526	85	8	35	27.3
Missouri Pacific*	1951	6,942	1,211,376	1,231,805	16,609	45,385	69.8	3,064,400	1,432,501	369	12	56	12.8
	1950	6,949	1,287,855	1,310,286	25,649	47,392	67.1	3,143,770	1,416,729	382	2	55	12.5
Texas & Pacific	1951	1,844	397,169	397,169	10,187	16,000	63.2	1,119,446	405,416	101	3	1	1.0
	1950	1,844	405,710	405,710	24,225	14,759	60.6	1,060,063	380,982	82	..	6	6.8
St. Louis-San Francisco	1951	4,570	684,563	690,628	7,581	25,758	66.6	1,703,396	759,563	207	66	88	24.4
	1950	4,604	676,759	684,146	7,479	23,696	67.5	1,553,932	695,497	211	89	63	17.4
St. Louis Southw. Lines	1951	1,562	416,685	418,800	5,527	17,072	72.2	1,048,293	468,602	81	9	15	14.3
	1950	1,562	348,877	351,229	4,829	15,460	74.2	905,519	404,780	78	9	17	16.3
Texas & New Orleans	1951	4,291	841,064	841,470	14,815	27,440	62.9	1,906,741	803,594	234	..	38	14.0
	1950	4,314	845,191	845,191	14,386	28,050	66.1	1,915,963	843,305	203	..	70	25.6

Items for the Month of July 1951 Compared with July 1950

	Region, Road and Year	Freight cars on line: Home	Foreign	Total	Per Cent B.O.	G.t.m.per train-hr. excl.locos. and tenders	G.t.m.per train-mi. excl.locos. and tenders	Net ton-mi. per train-mile	Net ton-mi. per l'd car-mile	Net ton-mi. per car-day	Car miles per car-day	Net daily ton-mi. per road-mi.	Train-miles per train-hour	Mi. per loco. per day
New Eng. Region	Boston & Maine 1951	1,327	8,948	10,275	2.2	37,041	2,336	1,015	27.2	810	41.6	4,916	15.9	95.6
	1950	1,699	9,083	10,782	4.5	38,252	2,446	1,042	26.1	793	42.9	5,036	15.7	91.3
	N. Y., N. H. & Htfd 1951	1,595	15,777	17,372	3.1	35,679	2,336	1,022	28.3	540	28.4	5,417	15.3	112.2
	1950	1,704	18,025	19,729	1.4	35,607	2,433	1,103	28.1	519	27.0	5,644	14.7	94.7
Great Lakes Region	Delaware & Hudson 1951	2,752	6,538	9,290	6.7	56,307	3,028	1,649	37.6	1,402	51.0	15,919	18.7	60.1
	1950	2,719	7,301	10,020	7.7	55,029	2,978	1,586	36.8	1,205	46.1	15,215	18.6	53.7
	Del., Lack. & Western 1951	5,074	10,824	15,898	5.8	45,115	2,978	1,373	30.6	727	34.1	12,112	15.4	116.9
	1950	5,842	11,377	17,219	10.9	44,143	2,882	1,301	29.5	656	32.0	11,752	15.7	97.9
	Erie 1951	6,923	22,159	29,082	3.5	59,482	3,429	1,348	25.8	892	53.6	11,778	17.5	101.5
	1950	7,764	22,249	30,013	4.9	58,076	3,359	1,361	26.2	952	54.5	12,992	17.4	114.8
	Grand Trunk Western 1951	3,669	9,137	12,806	6.0	44,988	2,229	962	29.3	587	30.9	8,070	20.4	133.9
	1950	4,124	11,252	15,376	6.3	47,587	2,391	1,038	29.8	590	30.6	9,353	20.1	150.0
	Lehigh Valley 1951	2,669	12,344	15,013	7.4	64,175	3,304	1,608	33.0	794	34.0	10,071	19.7	183.7
	1950	4,407	11,117	15,524	9.2	63,429	3,367	1,627	32.6	830	36.1	10,179	19.2	123.2
	New York Central 1951	53,621	108,435	162,056	6.5	44,377	2,636	1,204	32.9	651	31.4	10,190	17.1	79.4
	1950	59,278	107,871	167,149	8.9	42,728	2,545	1,122	30.5	644	33.6	10,058	17.1	85.9
	New York, Chic. & St. L. 1951	5,659	21,321	26,980	5.0	48,719	2,746	1,233	32.0	1,110	54.0	13,943	18.1	110.8
	1950	6,013	20,453	26,466	4.3	49,001	2,677	1,195	30.1	1,060	52.9	12,937	18.6	106.9
	Pitts. & Lake Erie 1951	3,373	13,077	16,450	9.9	51,419	3,429	2,141	51.7	362	9.9	27,663	15.0	73.0
	1950	4,873	10,848	15,721	18.1	48,758	3,497	2,166	50.7	382	10.7	27,542	14.0	69.8
	Wabash 1951	6,573	13,832	20,405	5.2	51,532	2,612	1,144	28.1	887	44.4	7,610	20.0	84.3
	1950	6,669	14,042	20,711	3.5	53,966	2,623	1,078	25.8	981	54.3	8,413	20.8	94.4
Central Eastern Region	Baltimore & Ohio 1951	45,515	58,450	103,965	6.1	42,281	3,041	1,507	38.1	765	32.0	13,323	14.1	79.9
	1950	28,819	52,033	80,852	11.9	36,676	2,698	1,306	39.1	894	36.1	12,132	13.9	81.5
	Central of New Jersey 1951	328	9,134	9,462	2.7	38,389	2,952	1,556	39.5	375	14.4	8,607	13.6	89.1
	1950	806	9,510	10,316	7.3	36,951	3,015	1,578	38.9	345	13.3	8,534	12.7	89.5
	Central of Pennsylvania 1951	1,736	3,208	4,944	20.7	42.119	2,945	1,591	39.6	651	23.8	16,000	15.3	101.2
	1950	1,321	4,475	5,796	13.2	42,207	3,137	1,702	40.0	623	22.8	16,845	14.4	65.4
	Chicago & Eastern Ill. 1951	1,511	2,815	4,326	13.6	40,067	2,451	1,184	32.1	1,112	50.2	5,597	16.5	161.5
	1950	1,388	3,386	4,774	11.9	41,267	2,316	1,072	28.9	829	41.0	4,987	17.9	186.9
	Elgin, Joliet & Eastern 1951	5,862	14,005	19,867	2.6	22,763	3,187	1,770	44.9	273	9.3	23,116	7.4	103.6
	1950	6,154	12,843	18,997	2.1	22,099	2,915	1,620	42.5	253	8.6	20,186	7.9	103.8
	Pennsylvania System 1951	91,936	117,633	209,569	9.1	46,602	3,074	1,499	35.1	706	30.8	14,905	15.7	83.5
	1950	98,152	126,632	224,784	14.7	44,988	3,102	1,518	34.5	673	29.6	15,132	15.0	83.8
	Reading 1951	11,142	18,476	29,618	5.1	36,632	2,824	1,520	42.1	554	20.2	13,124	13.0	68.4
	1950	11,341	22,678	34,019	9.0	37,695	2,982	1,641	42.1	544	19.0	13,630	12.6	63.5
	Western Maryland 1951	4,158	3,597	7,755	2.5	40,825	2,802	1,535	44.2	1,073	38.3	9,683	14.8	49.6
	1950	3,661	3,341	7,002	2.8	39,025	2,870	1,595	44.3	1,215	42.0	9,922	14.0	41.0
Pocahontas Region	Chesapeake & Ohio 1951	49,089	25,804	74,893	4.5	64,930	3,824	2,102	47.2	1,180	43.6	17,722	17.2	67.5
	1950	45,082	30,630	75,712	7.0	59,287	3,501	1,904	45.2	1,081	40.9	16,548	17.2	79.0
	Norfolk & Western 1951	29,006	7,736	36,742	2.9	67,745	4,048	2,177	47.6	1,284	46.5	22,164	17.0	95.7
	1950	23,232	7,799	31,031	2.8	63,599	3,837	2,028	44.9	1,307	49.2	18,952	16.8	79.9
Southern Region	Atlantic Coast Line 1951	11,926	17,171	29,097	2.9	33,610	2,034	936	32.4	818	40.6	4,404	16.6	55.3
	1950	10,952	14,776	25,728	4.6	32,106	1,945	892	30.9	795	39.4	3,764	16.6	62.4
	Central of Georgia 1951	1,927	5,127	7,054	4.5	33,599	1,891	875	31.2	919	43.5	3,871	17.9	73.3
	1950	2,223	4,954	7,177	5.5	30,592	1,700	793	30.2	939	44.0	3,848	18.1	86.7
	Gulf, Mobile & Ohio 1951	3,138	11,115	14,253	4.0	60,705	3,324	1,605	31.5	1,071	46.9	5,291	18.3	122.7
	1950	3,451	10,651	14,102	2.8	59,499	3,042	1,421	29.6	1,050	48.5	5,236	19.6	175.7
	Illinois Central 1951	21,268	26,418	47,686	3.0	45,075	2,502	1,155	32.8	1,081	51.5	8,428	18.2	81.2
	1950	18,777	29,459	48,236	3.6	46,814	2,539	1,176	32.4	1,106	52.2	8,341	18.6	79.1
	Louisville & Nashville 1951	27,518	15,653	43,171	10.7	37,330	2,301	1,162	37.1	888	37.6	7,920	16.3	88.5
	1950	28,260	14,586	42,846	12.5	36,461	2,223	1,124	36.8	913	38.7	8,215	16.5	85.8
	Nash., Chatt. & St. Louis 1951	1,223	4,296	5,519	4.3	38,145	1,972	950	30.4	1,002	44.1	5,299	19.4	109.9
	1950	1,838	4,713	6,551	5.1	38,036	1,858	865	28.6	868	40.7	5,518	20.5	106.4
	Seaboard Air Line 1951	9,432	12,983	22,415	2.3	43,494	2,435	1,118	32.1	994	47.8	5,421	18.1	71.2
	1950	8,356	13,129	21,485	2.2	39,663	2,270	1,030	30.7	916	45.5	4,808	17.8	65.6
	Southern 1951	12,546	28,390	40,936	3.9	36,574	2,129	972	28.9	868	42.7	5,592	17.3	71.9
	1950	13,219	27,306	40,525	2.4	36,290	2,114	955	28.3	870	43.6	5,536	17.3	68.9
Northwestern Region	Chicago & North Western 1951	18,036	32,601	50,637	4.4	42,542	2,786	1,259	32.5	723	33.4	4,511	16.1	73.4
	1950	18,773	37,605	56,378	3.3	41,735	2,741	1,177	30.0	610	31.0	4,279	15.9	84.1
	Chicago Great Western 1951	1,585	5,845	7,430	2.7	61,731	3,722	1,733	30.8	989	44.9	5,058	16.6	143.5
	1950	1,148	6,552	7,700	2.5	60,816	3,501	1,606	28.6	1,079	50.8	3,959	17.5	112.4
	Chic., Milw., St. P. & Pac. 1951	30,025	35,737	65,762	4.6	44,245	2,652	1,218	31.9	693	33.2	4,192	16.8	75.9
	1950	26,056	38,223	64,279	3.0	42,186	2,598	1,165	29.9	764	38.3	4,599	16.4	89.3
	Chic., St. P., Minn. & Omaha 1951	1,051	8,340	9,391	3.6	29,785	2,114	993	34.2	650	28.4	3,802	14.8	79.6
	1950	971	9,087	10,058	3.1	27,644	2,101	948	29.8	631	29.7	3,897	13.6	72.6
	Duluth, Missabe & Iron Range 1951	13,020	2,677	15,697	2.3	88,104	5,035	3,047	62.9	1,366	42.8	37,700	18.2	118.8
	1950	13,060	1,582	14,642	2.4	88,844	5,432	3,284	61.6	1,355	43.7	35,343	17.0	143.5
	Great Northern 1951	24,146	15,238	39,384	4.5	49,281	3,211	1,682	40.2	1,353	50.8	6,662	15.5	76.7
	1950	22,132	18,801	40,933	4.5	47,496	3,190	1,659	39.8	993	38.6	4,991	15.1	60.2
	Minneap., St. P. & S. Ste. M. 1951	6,583	9,032	15,615	6.1	43,904	2,369	1,170	34.8	994	43.4	3,772	18.7	118.3
	1950	5,592	9,204	14,796	8.3	43,143	2,395	1,161	31.5	1,011	45.8	3,569	18.2	121.1
	Northern Pacific 1951	19,279	17,923	37,202	6.1	48,934	2,905	1,386	33.1	942	40.1	5,199	17.0	71.3
	1950	17,386	16,662	34,048	7.7	48,571	2,907	1,389	31.7	1,136	50.1	5,985	16.9	87.1
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) 1951	46,157	38,605	84,762	4.1	51,763	2,736	1,087	27.8	972	53.9	6,452	19.1	109.1
	1950	44,180	34,583	78,763	5.0	56,958	2,804	1,049	25.5	1,161	69.6	7,153	20.4	119.5
	Chic., Burl. & Quincy 1951	17,913	26,379	44,292	3.9	54,215	2,955	1,376	30.4	1,248	58.6	6,131	18.5	86.8
	1950	14,978	26,100	41,078	4.8	54,007	2,878	1,342	31.3	1,157	53.9	5,558	18.8	72.9
	Chic., Rock I. & Pac. 1951	9,329	26,397	35,726	3.2	41,335	2,380	1,115	31.4	937	43.9	4,234	17.5	103.2
	1950	10,277	21,035	31,312	6.0	44,467	2,377	996	28.2	924	53.5	2,741	18.8	71.5
	Denver & R. G. Wn. 1951	7,236	5,506	12,742	3.7	55,498	3,099	1,484	31.9	1,081	45.5	5,910	18.0	72.5
	1950	7,569	7,399	14,968	5.2	42,408	2,449	1,192	32.0	729	32.7	3,595	17.4	52.7
	Southern Pacific 1951	25,817	54,042	79,859	2.6	49,362	2,959	1,147	26.6	1,075	63.4	10,317	17.0	108.0
	1950	25,424	48,852	74,276	2.9	47,038	3,006	1,165	26.6	1,169	69.1	10,969	15.9	109.4
	Union Pacific 1951	30,301	36,104	66,405	2.8	65,394	2,982	1,265	28.8	1,369	71.1	9,449	22.2	109.9
	1950	24,863	37,616	62,479	2.4	66,188	2,968	1,183	26.8	1,562	87.0	10,007	22.6	125.7
	Western Pacific 1951	1,700	3,617	5,317	8.2	68,537	3,167	1,500	29.5	1,833	82.0	9,067	21.7	87.1
	1950	2,029	3,838	5,867	9.9	60,215	2,811	1,297	28.2	1,695	76.7	5,813	21.5	65.2
Southwestern Region	International-Gt. Northern* 1951	631	6,252	6,883	3.0	46,425	2,412	1,141	35.8	933	39.6	6,167	19.4	106.1
	1950	765	7,497	8,262	1.7	47,941	2,516	1,229	35.3	1,000	40.7	7,037	19.3	99.6
	Kansas City Southern 1951	1,035	6,526	7,561	3.6	63,125	3,500	1,663	31.4	1,150	51.7	9,264	18.2	86.2
	1950	1,066	5,849	6,915	2.6	70,500	3,677	1,704	31.7	1,248	58.4	9,682	19.3	103.1
	Mo.-Kans.-Texas Lines 1951	3,943	6,043	9,986	9.7	39,388	2,274	1,028	28.3	1,079	54.0	3,358	17.5	100.0
	1950	3,064	5,488	8,552	3.6	44,301	2,339	1,041	28.2	1,300	69.3	4,438	19.0	113.6
	Missouri Pacific* 1951	17,743	22,125	39,868	2.7	44,608	2,557	1,195	31.6	1,187	53.8	6,657	17.6	99.7
	1950	14,803	22,824	37,627	2.1	47,615	2,452	1,105	29.9	1,189	59.3	6,577	19.5	108.9
	Texas & Pacific 1951	1,837	8,112	9,949	5.5	61,035	2,821	1,022	25.3	1,245	77.8	7,092	21.7	135.0
	1950	2,414	6,682	9,096	6.2	54,931	2,619	941	25.8	1,204	77.0	6,665	21.0	171.2
	St. Louis-San Francisco 1951	9,262	17,262	26,524	2.9	40,156	2,501	1,115	29.5	996	50.7	5,361	16.1	67.4
	1950	7,255	13,460	20,715	3.6	40,782	2,304	1,031	29.4	1,014	51.2	4,873	17.8	68.4
	St. Louis Southw. Lines 1951	1,596	5,578	7,174	2.3	47,473	2,525	1,129	27.4	2,074	104.6	9,677	18.9	141.1
	1950	1,506	5,222	6,728	2.1	51,116	2,598	1,161	26.2	1,935	99.6	8,359	19.7	119.6
	Texas & New Orleans 1951	3,633	16,121	19,754	2.7	44,435	2,285	963	29.3	1,336	72.5	6,041	19.6	106.4
	1950	3,817	17,868	21,685	2.5	43,676	2,286	1,006	30.1	1,245	62.7	6,306	19.3	107.5

*Report of trustee or trustees.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.



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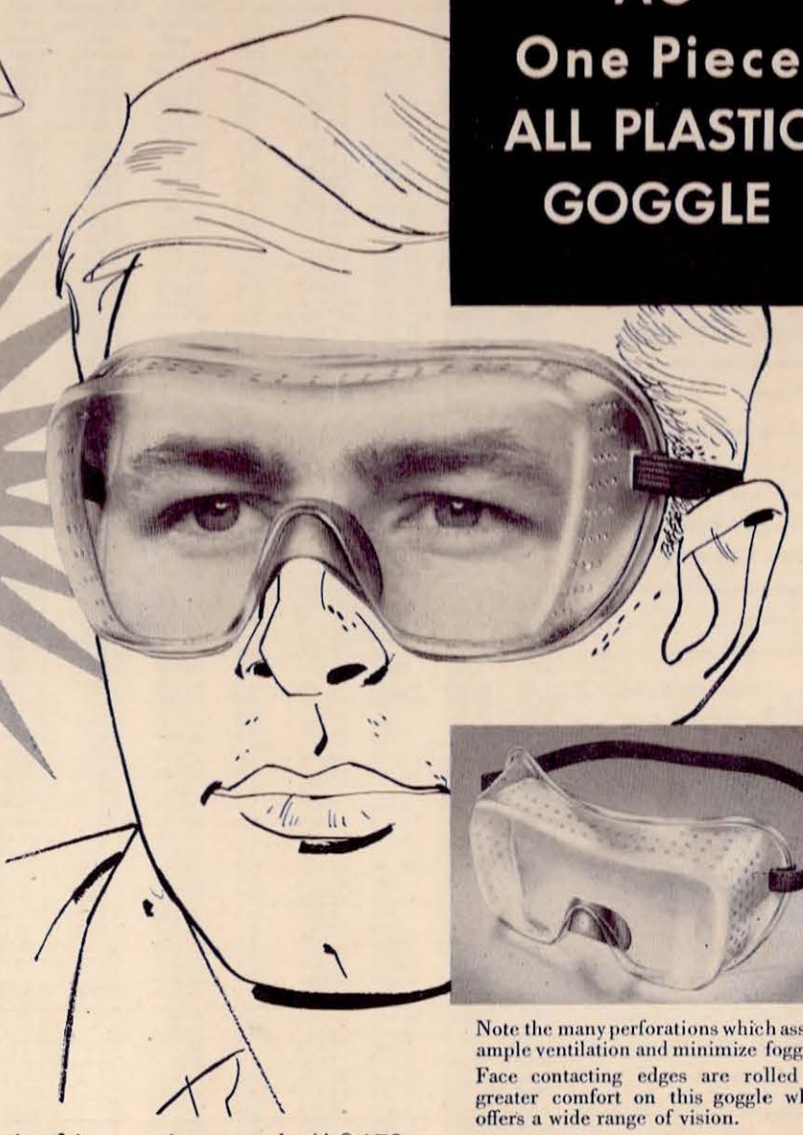

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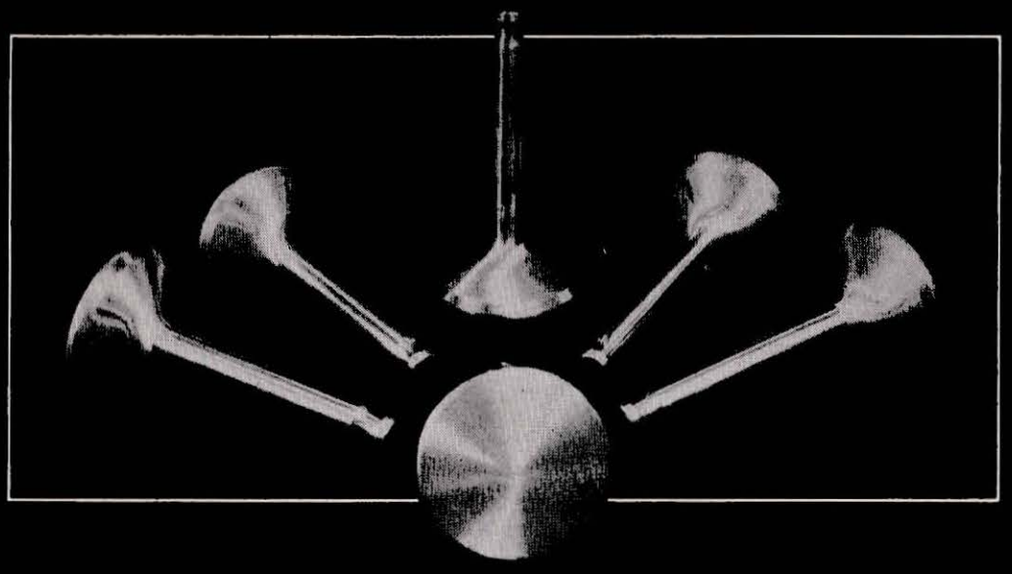

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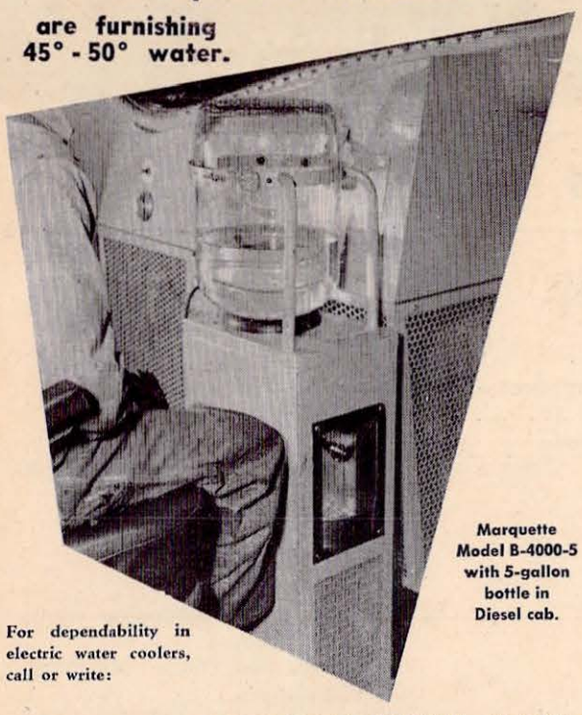

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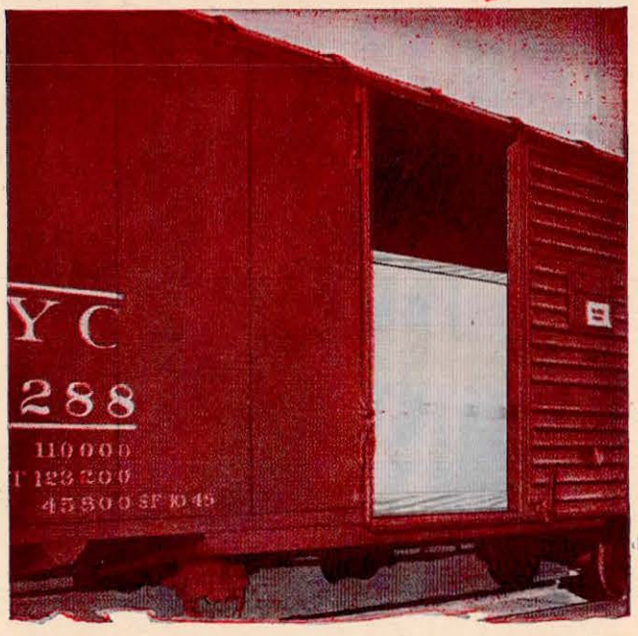

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American Hair & Felt Co. 66
American Hoist & Derrick Company 32
American Optical Company .. 80
American Steel & Wire Company 26
American Steel Foundries 33

B

Baldwin-Lima-Hamilton Corporation 19
Bendix Aviation Corporation, Scintilla Magneto Division .. 76
Bethlehem Steel Company 3
Budd Company, The 64, 65

C

Chicago Steel Service Company 84
Columbia Steel Company 26
Combustion Engineering-Superheater, Inc. 63

D

Differential Steel Car Company 72
Dyer Co., Inc., W. H. 82

E

Eastman Kodak Company 81
Electro-Motive Division, General Motors Corporation 20, 21

F

Flannery Manufacturing Company 10
Frank, M. K. 82

G

General American Transportation Corporation 36
General Railway Signal Company ..... Back Cover
General Steel Castings 75

H

Hunt Company, Robert W. 82

I

Iron & Steel Products, Inc. 82

L

Lamson & Sessions Company, The 35

M

Marquette Railway Supply Co. 83
Mississippi Valley Equipment Co. 82

N

National Aluminate Corporation 2
National Malleable and Steel Castings Company 73

P

Peerless Equipment Company .. 69
Pennsylvania Wire Glass Company 22
Portland Cement Association .. 34
Pressed Steel Car Company, Inc. 71
Pullman-Standard Car Manufacturing Company 28, 29
Purdy Company, The 83
Pyrene Manufacturing Company 70

R

Railway Educational Bureau, The 82
Remington Rand Inc. 30, 31

S

Scullin Steel Co. 85
Signode Steel Strapping Company 83
Simmons-Boardman Publishing Company 74
Socony-Vacuum Oil Co., Inc. 9
Standard Manifold Company .. 84
Superheater, Inc.-Combustion Engineering 63

T

Tennessee Coal, Iron & Railroad Company 26
Timken Roller Bearing Company, The ..... Front Cover

U

Union Switch & Signal Company 6
Union Wire Rope Corporation 77
United States Steel Company .. 26
United States Steel Export Company 26

V

Vapor Heating Corporation .. 23

W

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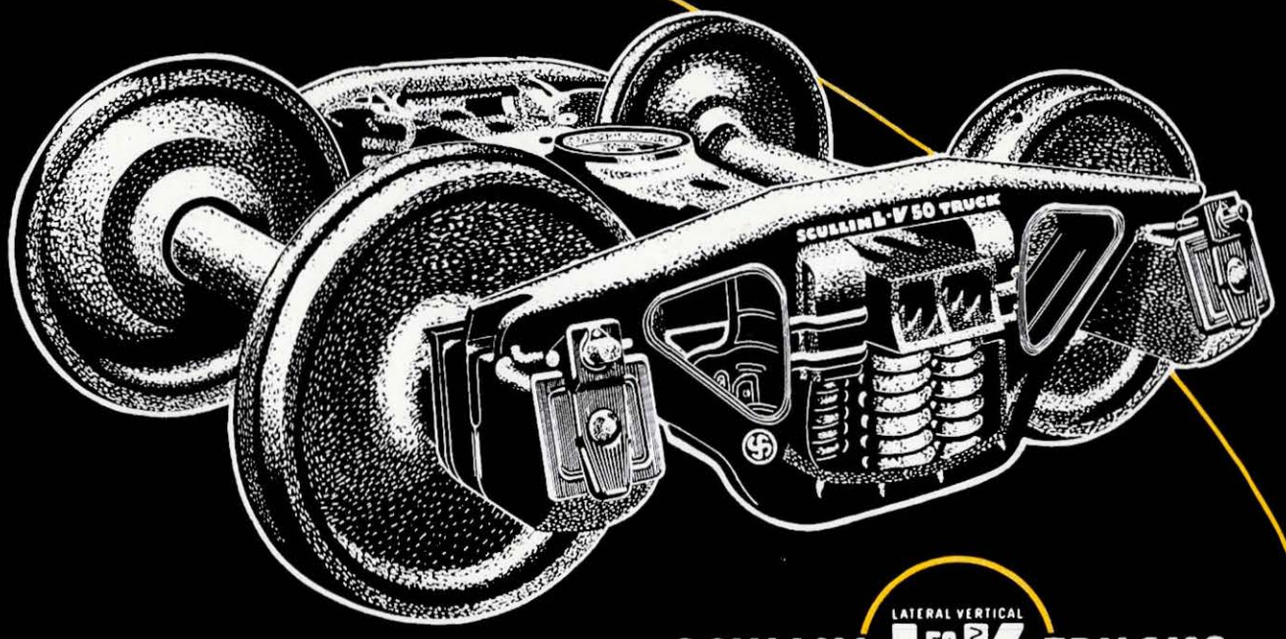

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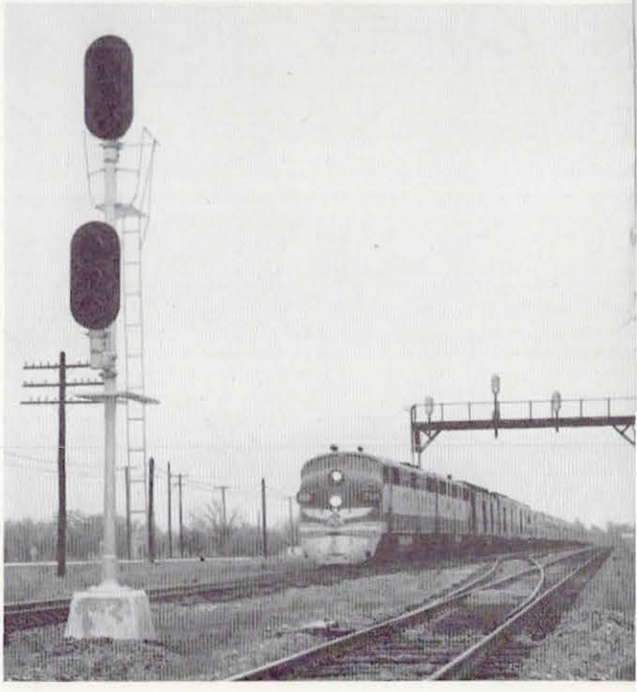

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